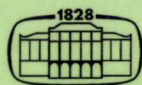


Acta Linguistica Hungarica

AN INTERNATIONAL JOURNAL OF LINGUISTICS

Volume 51 Numbers 1–2
2004



Akadémiai Kiadó
Budapest

Member of
Wolters Kluwer Group

Acta Linguist. Hung. ALHUE8 HU ISSN 1216-8076

ACTA LINGUISTICA HUNGARICA

AN INTERNATIONAL JOURNAL OF LINGUISTICS

Acta Linguistica Hungarica publishes papers on general linguistics with particular emphasis on discussions of theoretical issues concerning Hungarian and other Finno-Ugric languages. Papers presenting empirical material must have strong theoretical implications. The scope of the journal is not restricted to the traditional research areas of linguistics (phonology, syntax and semantics, both synchronic and diachronic), it also covers other areas such as socio- and psycholinguistics, neurolinguistics, discourse analysis, the philosophy of language, language typology, and formal semantics.

Book and dissertation reviews are also published. The articles should be written in English, exceptionally, however, papers written in German and French are also accepted.

The journal is published in yearly volumes of four issues by

AKADÉMIAI KIADÓ

Prielle K. u. 19/D, H-1117 Budapest, Hungary

<<http://www.akkrt.hu/journals/aling>>

Manuscripts and editorial correspondence should be addressed to

ACTA LINGUISTICA HUNGARICA

Institute for Linguistics

P.O. Box 701/518, H-1399 Budapest, Hungary

Phone: (36 1) 351 0413

Fax: (36 1) 322 9297

E-mail: kiefer@nytud.hu

siptar@nytud.hu

Orders should be addressed to

AKADÉMIAI KIADÓ

P.O. Box 245, H-1519 Budapest, Hungary

Fax: (36 1) 464 8221

E-mail: journals@akkrt.hu

Subscription price for Volume 51 (2004) in 4 issues: EUR 228 + VAT incl. online and normal postage; airmail delivery EUR 20.

© *Akadémiai Kiadó, Budapest 2004*

Acta Linguistica Hungarica is abstracted/indexed in Bibliographie Linguistique/Linguistic Bibliography, International Bibliographies IBZ and IBR, Linguistics Abstracts, Linguistics and Language Behaviour Abstracts, MLA International Bibliography

ACTA LINGUISTICA HUNGARICA

AN INTERNATIONAL JOURNAL OF LINGUISTICS

EDITOR-IN-CHIEF:

FERENC KIEFER

HUNGARIAN ACADEMY OF SCIENCES, BUDAPEST

ASSOCIATE EDITOR:

PÉTER SIPTÁR

EÖTVÖS LORÁND UNIVERSITY, BUDAPEST

REVIEW EDITOR:

BEÁTA GYURIS

HUNGARIAN ACADEMY OF SCIENCES, BUDAPEST

EDITORIAL BOARD:

HUBERT HAIDER

UNIVERSITÄT SALZBURG

MARTIN HASPELMATH

MAX-PLANCK-INSTITUT, LEIPZIG

HARRY VAN DER HULST

UNIVERSITY OF CONNECTICUT

ISTVÁN KENESEI

HUNGARIAN ACADEMY OF SCIENCES

ANDRÁS KERTÉSZ

UNIVERSITY OF DEBRECEN

KATALIN É. KISS

HUNGARIAN ACADEMY OF SCIENCES

EDITH MORAVCSIK

UNIVERSITY OF WISCONSIN, MILWAUKEE

CSABA PLÉH

BUDAPEST UNIVERSITY OF TECHNOLOGY

AKADÉMIAI KIADÓ
BUDAPEST

ACTA LINGUISTICA HUNGARICA

VOLUME 51, NUMBERS 1–2, 2004

CONTENTS

GUEST EDITOR'S NOTE	1
<i>Fejes, László</i> : "Compound verbs" in Komi: grammaticalisation without a grammatical morpheme?	5
<i>Forgács, Tamás</i> : Grammaticalisation and preverbs	45
<i>Geisler, Michael</i> : Can 'nothing' be grammaticalised? Com- ments on Permian vowel ~ zero alternations	85
<i>Havas, Ferenc</i> : Objective conjugation and medialisation	95
<i>Tamm, Anne</i> : On the grammaticalization of the Estonian per- fective particles	143
<i>Zayzon, Réka</i> : Funktionswandel deiktischer Stämme im Ngana- sanischen: Grammatikalisierung, Lexikalisierung, Prag- matikalisierung	171
BOOK REVIEWS	199
HUNGARIAN BOOKS ON LINGUISTICS	223

GUEST EDITOR'S NOTE

There can be no doubt that, traditionally, the most thorough and most reliable results in the research on Uralic languages have been provided by historical descriptions. These languages, despite the changes they underwent in the course of their history, have basically retained their agglutinative character. Their morphological categories invariably exhibit rich paradigms, even if they do so in diverse ways from one language to another, not to mention their extensive systems of derivational suffixes. The analyses that were aimed at revealing how those morphological categories had taken shape and what changes had resulted in their assuming their present character pinpointed a number of historical events that have been referred to in recent decades as processes of grammaticalisation, ranging from the development of rich systems of postpositions to the emergence of local case suffixes and that of verbal personal suffixes or possessive suffixes, to mention just the most well-known examples. Since these changes have their phonological, syntactic, and semantic aspects, past research on them has accumulated a valuable body of knowledge that now makes it possible for us to reflect upon them in terms of processes of grammaticalisation and gives us clues, on the side of Uralistics, that may contribute to what is cross-linguistically known about such changes. This insight underlay the idea that the 2003 session of the Budapest Uralic Workshop that is organised every second year by the Department of Finno-Ugristics of the Research Institute for Linguistics of the Hungarian Academy of Sciences be devoted to that topic, under the title 'Uralic Grammaticaliser'. That session was organised in the hope that its participants would exchange their ideas concerning the results of their research in the past few years. Thus, the aim of the 2003 workshop was not to discuss the status of grammaticalisation among the various historical changes that languages may undergo or to find out whether the principle of unidirectionality is in general valid with respect to grammaticalisation, etc., but rather to see if it makes sense to discuss and interpret the emergence of certain elements or rules realised in the various grammatical categories of Uralic languages in terms of grammaticalisation. Given that, as far as we know, no scholarly conference had previously been organised on that

Akadémiai Kiadó, Budapest

particular topic within Uralistics, we were also hoping that ours would have a fertilising effect on further research in that area.

The present issue of *Acta Linguistica Hungarica* (as well as one of its forthcoming issues) includes (mainly extended and revised versions of) some of the papers that were delivered at the workshop specified above. Since there are practically no Uralic languages that had not been mentioned during the workshop, it can be said that all members of that family of languages are discussed in the papers in this collection (and its sequel), even if they are seen from the most diverse perspectives in the particular papers. The diversity of languages and aspects would have made it difficult and perhaps also superfluous for us to try and arrange the papers of this issue in some thematic order. Therefore, they are presented in an alphabetic order of their authors' names and their topics will also be briefly indicated below in that order.

László Fejes in his paper entitled "*Compound verbs*" in *Komi: Grammaticalisation without a grammatical morpheme?* attempts to clarify the nature and emergence of Komi-Zyryan compound verbs in terms of constructional grammar. The paper also deserves attention because it tries to take a clear stand on the issue of what a "compound word" really is. In particular, it explores compounds that end in some recognisable verb and begin with some constituent that can be identified as an instance of another part of speech but does not occur on its own. The author concludes his paper with an assessment of possible processes of grammaticalisation vs. lexicalisation.

Tamás Forgács analyses the process of emergence of some members of the rich array of Hungarian preverbs, that is, the historical change adverb > preverb in that language (*Grammaticalisation and preverbs*). There are divergent views in the literature concerning the size of the stock of Hungarian preverbs basically because it is difficult to tell exactly in which cases we "still" have to do with an adverb and when do we have a preverb "already". The paper applies the "centre vs. periphery" model of the Prague School to point out differences in degree between those two categories.

Michael Geisler's paper *Can 'nothing' be grammaticalised? Comments on Permian vowel ~ zero alternations* discusses, with respect to the Permian languages, an issue that often recurs in the grammaticalisation literature under various guises. The issue he discusses is how vowel ~ zero alternations (that can be observed in those languages rather infrequently), or rather the relationships that obtain between such alternants,

can be grammaticalised. In conclusion he points out the multi-stage nature of that development in which a process of lexicalisation is followed by one of grammaticalisation.

Ferenc Havas looks at what he calls a textbook example of grammaticalisation, the emergence of verb forms exhibiting a person/number marking morpheme, in his paper *Objective conjugation and medialisation*. Although his analyses mainly concern Hungarian, his ideas may be relevant for other languages as well. The description, embedded as it is in a typological framework, lists and refutes previous attempts at explaining the emergence of objective (definite) conjugation, and argues that third person singular definite verb forms are to be distinguished from first and second person forms in that, in the case of the latter, the verb forms now interpreted as belonging to the indefinite conjugation originally came into being in order to express mediality.

Anne Tamm in her paper *On the grammaticalization of the Estonian perfective particles* explores a case of the expression of aspectuality, that is, the emergence of the perfectivising function of the particle *ära*, analysing it in terms of lexicology, semantics, and syntax. Her description also conveys important pieces of information on aspectuality in Estonian in general, highlighting for instance the relationship between argument structure and aspect or that between other particles and aspect. In conclusion she claims that the particle *ära* emerges as a well-defined, distinct aspectual, semantic and syntactic unit.

Réka Zayzon's paper *Funktionswandel deiktischer Stämme im Nganasanischen: Grammatikalisierung, Lexikalisierung, Pragmatikalisierung* deals with Nganasan, one of the most endangered Uralic languages. On the basis of a large text corpus, she explores various changes of deictic stems in that language, pointing out types of changes that are less (or not at all) known from the relevant literature. Such an instance may be the Px3sg-inflected pronoun *siti* that eventually represents the final stage of a path of change noun > pronoun.

The papers in this volume present historical events in Komi, Hungarian, Permian, Estonian, and Nganasan in terms of grammaticalisation, whereas the forthcoming sequel to this collection will contain analyses of further phenomena in other Uralic languages, not covered here.

Marianne Bakró-Nagy

“COMPOUND VERBS” IN KOMI: GRAMMATICALISATION WITHOUT A GRAMMATICAL MORPHEME?

LÁSZLÓ FEJES

Abstract

This paper explores Komi-Zyryan compound verbs. A small class of verbs can be formally recognised in posterior constituents of compound verbs, and compounds involving each of these verbs exhibit semantic and grammatical properties characteristic of their posterior constituents. On the other hand, the individual compound verbs are semantically non-compositional. The posterior constituents cannot be taken to be form–meaning complexes, i.e., morphemes. Therefore, some other, non-morpheme-based linguistic analysis is needed. This is a peculiar case of grammaticalisation where the result is not a grammatical morpheme.

1. Introduction

This paper is intended to make a contribution to the issue of the definition of grammaticalisation. There are a number of known types of grammaticalisation; yet its most typical type is perhaps the case where an independent morpheme whose meaning refers to some piece of extralinguistic reality assumes a grammatical function, i.e., one that belongs to the linguistic system (or else it comes closer to having such a function than it did earlier). A characteristic instance of this is a noun referring to some place becoming a postposition or a case suffix (a locative one, which can later turn into a grammatical one) or a verb with some concrete meaning becoming an auxiliary or a bound morpheme that marks tense, aspect, Aktionsart, etc.

There are constructions in languages that cannot be unproblematically segmented into constituent morphemes. Such constructions can also come about by way of grammaticalisation; for instance, when a phonological alternation gets morphologised because the phonological context that has triggered it disappears. If, in such cases, the morphologised alternation simultaneously (or subsequently) assumes some function within the

grammatical system, we can speak of grammaticalisation without being able to point out a grammatical morpheme.¹

In what follows, a Finno-Ugric (Komi-Zyryan) example will be presented in which the original elements to be grammaticalised can be analysed as morphemes, the arising grammaticalised constructions nevertheless definitely contradict, on a large scale, the assumption that the meaning of a larger linguistic form is composed of the meanings of smaller linguistic forms that it is composed of (as well as the meaning of the construction type itself). The constructions figuring in this example are known as “compound verbs”.

By this term, I will refer to lexical items that end in a recognisable verb, preceded by some element that either occurs on its own (as a noun, an adjective, an adverb, etc.) or it does not. I will ignore verbs that are derived from compound verbs. I will exclude from the range of compound verbs those constructions of two verbs both stems of which are conjugated. (These are called “paired verbs” in Komi linguistics anyway.) The corpus investigated comes from the most recent Komi–Russian dictionary (Beznosikova et al. 2000). That dictionary contains approximately four times as many such words as the earlier largest Komi–Russian dictionary (Lytkin 1961) does.²

I only consider compounds that are written solid in the dictionary. There are additional cases in which a verb is immediately preceded by a nominative noun/adjective or by an onomatopoetic item or else an item that does not occur on its own but which are written as two words (e.g., *ńurs kiskĩńĩ*³ ‘grow gaunt, perforate with hunger (said of somebody’s stomach)’ vs. *ńursmunnĩ* ‘be compressed, shrink’; *ruź leźńĩ* ‘weaken, relax’ vs. *ruźmunnĩ* ‘lose strength, become weaker’.) Unfortunately, obviously due to its genre, the dictionary does not offer any explanation of the two kinds of spelling. The presumable reason is as follows. According to the relevant literature,⁴ compound verbs (primarily those with an onomatopoetic first constituent) get split in negation: either the negative verb (perhaps more precisely: negativ auxiliary) comes between the

¹ For the analysis of Umlaut structures of this type, cf. Hockett (1954/1957).

² For the purposes of comparison, I have collected compounds whose last constituent is *munnĩ* down to *ĩ* according to the Latin alphabet: this means 73 compounds that are located in various parts of the dictionary according to the Cyrillic alphabet. Of these, Lytkin’s dictionary includes a mere 20.

³ In this paper, verbs are cited in the infinitive; *-ńĩ* is the infinitive suffix.

⁴ Bartens (2000, 271); Sidorov (1953, 83).

first and last constituent, or the anterior constituent comes to follow the posterior one. It appears that the compounds that the dictionary spells solid do not get split up in negation. This guess has been corroborated by a native speaker:⁵ the verbs making up the corpus here do not get split from their anterior constituents in negation (except for a few verbs ending in *kerni* or *ležni* that can occur with anterior constituents that do split). (Of course, the possibility that some items in which the preverbal element does not get split are also written as two words in the dictionary cannot be totally excluded, either.)

In order to be able to present a unified picture, I have not added items taken from other sources to those occurring in the dictionary.⁶

The meanings of the verbs at hand will only be investigated on the basis of the dictionary mentioned; their use could at most be discussed as it emerges from the sample sentences that the dictionary gives. The occurrence of such verbs in running texts is extremely rare. Part of the reason is that they are stylistically marked, they often exhibit synonymy (both among one another and with items of a different morphological makeup) and it is frequently the case that their meanings, onomatopoeic ones in most cases, make it unlikely that they should often occur in everyday texts. On the other hand, even their investigation in texts would not answer a number of questions (like that of their interchangeability). For our purposes here, the meaning specifications that are given in the dictionary are quite sufficient.

I think it is important to emphasise that this research is a synchronic one; therefore I will question or deny certain connections between first elements of compound verbs and other words that are likely or even straightforward in terms of historical-etymological criteria.

⁵ I wish to thank Nikolai Kuznetsov here for the help he has provided while I was writing this paper. I would also like to thank Péter Siptár for his help with the English translation.

⁶ Since some members of the audience have expressed doubts as to the validity of the data taken from the dictionary, I take it to be my duty to point out that Nikolai Kuznetsov has corroborated the validity of the data used here. He only found a couple of verbs he had not known: in view of the fact that this is a peripheral part of the word stock and a large number of data is involved, the corpus can be taken to be totally valid.

2. Compound verbs

2.1. General description

The verbs that occur fairly often as posterior constituents of Komi-Zyryan compound verbs are *munni*, *kivni*, *vižni*, *kerni*, *vartni*, *večni*. But even the number of such compounds is uneven: the corpus contains 281 verbs with *munni* as their last constituent but only 16 with *večni*. The number of occurrences of the other four verbs falls between those two extremes but there are no two verbs whose occurrence would be roughly equal. Verbal posterior constituents other than the six listed above only occur in a handful of examples, or even in just a single one. In what follows, compound verbs will be characterised in terms of their posterior constituents first; then we will look at the anterior constituents.

2.2. Compounds ending in *munni*

The corpus contains a total of 281 verbs whose posterior constituent is *munni* 'go'. Of these, only a small number are such that their anterior constituents can be identified with some noun, adjective, or non-onomatopoeic adverb.⁷ Therefore, adverbs of an onomatopoeic character will be separated from other adverbs and treated here together with onomatopes.⁸

Of the verbs ending in *munni*, the following have a noun as an anterior constituent:

⁷ It is virtually impossible to tell onomatopoeic words and adverbs of an onomatopoeic character apart, given that in Komi any onomatope can be used as an adverb, cf. *He walked along the corridor knock knock* 'He walked along the corridor with pattering steps'.

⁸ By 'onomatopes' I will mean both onomatopoeic adverbs and onomatopoeic sentence-words here. The use of the term as denoting a part of speech is not new in the literature, cf., e.g., Bereczki (2002, 170). Corresponding items are referred to as 'ideophones' by Raija Bartens who characterises them as follows: "[...] sanoja, jotka perustavat ääneasun kuvailevuuteen ja sisältävät siksi usein kielessä muuten periferisiä foneemeja ja foneemiyhdistelmiä. [...] Lauseasevaltaan ne ovat substantiivin attribuutteinakin, ja joskus ne edustavat lauseen predikaatinkin. [...]" (Bartens 2000, 326).

(1)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>bustumnni</i>	dip into a dust-like substance	dust
	<i>ćukirmunnı</i>	get wrinkled	wrinkle, fold
	<i>gımmunnı</i>	crash down	thunder, storm
	<i>iřlovumnı</i>	sigh once	sigh, breath
	<i>kusıńmunnı</i>	bend, get crooked	bend, crook, curvature
	<i>ligısmunnı</i>	lose strength, get tired	weakness, tiredness, fatigability
	<i>nırmunnı</i>	come to life, revive, be reborn	sprout, germ
	<i>nırgormunnı</i>	snort	snort, snore ('nose' + 'sound')
	<i>ńorovumnı</i>	bend, bow down	bend, curvature
	<i>ńukırmunnı</i>	be seized in a cramp; sink (of heart)	cramp
	<i>ńummunnı</i>	start smiling	smile
	<i>objırmunnı</i>	doze off, fall into a slumber	slumber, doze, light sleep
	<i>ońıřmunnı</i>	become sleepy, droop	sleepiness, languishment
	<i>řemesmunnı</i>	be astonished, be surprised	astonishment, surprise
	<i>řenmunnı</i>	be astonished, be surprised	astonishment, surprise
	<i>řpińmunnı</i>	start smiling	smile
	<i>vařmunnı</i>	start smiling	smile (dialectal)

There are some cases in which the connection between the noun and the verb is unclear: *piř* 'flour' : *piřmunnı* 'get smashed, get broken'. In other cases, the forms are not quite identical, though the meaning can be reconciled easily: *řıl* 'smooth, calm water surface' : *řılkumnı* 'become smooth'. The relatedness of *tıvıvmunnı* 'get drenched, soak through, become saturated' and the compound noun *tıvıv* 'surface of lake' is even more doubtful. The anterior constituent of *jugmunnı* 'flash, gleam, shine' is a bound stem recognisable in *juger* 'light' and *jugıd* 'light'. (The formally doubtful cases are mentioned here because I do not want to exclude the possibility of finding some morphological regularity later that explains formal changes like the deletion of a suffix.)

In a majority of cases, the verb expresses getting into some state. The noun itself may refer to that state (astonishment, sleepiness, light sleep, feebleness) but not in all cases (cramp, bend, smile). All in all, there are comparatively few such cases, and the examples we have are semantically not uniform. The construction is not productive, new words are not derived according to this pattern.

In another group of noun-initial compounds a third constituent, *řer*, divides the nominal anterior constituent and the verbal posterior constituent. There is a noun of that form, meaning 'pattern, ornament, colouring; pock-mark; ripple (of water); carving, engraving, etc.'. As

can be seen from the examples below, such meaning is not found in the compound verbs:

(2)

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>gírdšermunnĭ</i>	bleed to death	blood
<i>gumšermunnĭ</i>	spear, shoot up	stalk
<i>jajšermunnĭ</i>	gain weight, recover, recuperate	flesh, body, muscle
<i>kokšermunnĭ</i>	lengthen, grow tall	leg
<i>lišermunnĭ</i>	become a bag of bones, grow thin	bone
<i>ňajtšermunnĭ</i>	become mud	mud
<i>nĭršermunnĭ</i>	become long-nosed	nose
<i>ňumšermunnĭ</i>	start smiling	smile
<i>špiňšermunnĭ</i>	start smiling	smile
<i>viršermunnĭ</i>	bleed to death	blood

The semantic relation between the first constituent and the verb is variegated here, too; in addition, the meanings of *ňumunnĭ* and *ňumšermunnĭ* are not distinct. (The difference between *nĭrmunnĭ* and *nĭršermunnĭ* can be traced back to two different meanings of *nĭr*.) The item *šer* in itself does not form a compound either with any of the first constituents, or with *munnĭ*; therefore, there are no formal or semantic arguments to favour either $[N + [\textit{šer} + \textit{munnĭ}]]$ or $[[N + \textit{šer}] + \textit{munnĭ}]$; moreover, the ‘flat’ structure $[N + \textit{šer} + \textit{munnĭ}]$ cannot be excluded, either (of course, ‘structure’ is meant purely formally here).

There are a few examples of adjective-initial compounds as well:

(3)

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>bugžĭľmunnĭ</i>	cast a malicious glance at	malicious, nasty
<i>ćatěrmunnĭ</i>	lean back, tilt backwards	retroflexed, leaning back
<i>ćažmunnĭ</i>	hit something creaking	dry, creaking
<i>ćĭrmunnĭ</i>	become crumbly, friable	crumbly, friable
<i>ćošmunnĭ</i>	supervise, start listening	attentive, prick-eared
<i>žugĭľmunnĭ</i>	grow sad, be sad	sad
<i>labmunnĭ</i>	lose strength, weaken	weak
<i>luňmunnĭ</i>	droop, sag, swetler	wilted, dangling (tail)
<i>ľasmunnĭ</i>	be squashed, be flattened out	flat
<i>vekĭšmunnĭ</i>	grimace, pull faces	crooked, disstorted
<i>žermunnĭ</i>	split, burst open (wound)	open, opened
<i>žermunnĭ</i>	petrify	stoned (e.g., tooth)

As the examples suggest, there is a strong tendency for the verb to mean that the subject begins to be characterised by the property referred to by the adjective. Perhaps the verb *pašmunnĭ* 'break in pieces, get broken; creep out, escape' can be seen as belonging here, too (cf. *paś* 'open, opened'). Though semantically doubtful, the relationship between *šlupmunnĭ* 'lose weight, grow thin, shrink, weaken' and *šlup* 'loose-fitting (dress)' cannot be excluded, either. Also, the verbs *lotmunnĭ*, *lut-letmunnĭ* 'droop' are not unrelated to this type, even though the adjectives *lot*, *lut-let* 'dead on one's feet, sagging, sweltering' can only be used predicatively (not attributively).

In two cases, it is dubious whether the anterior constituent is related to an adjectival stem. In the case of *pešmunnĭ* 'get hot, suddenly start feeling warm', the first constituent *peś* can be related to the compound verb either as a noun ('heat') or as an adjective ('hot'), whereas *čevmunnĭ* 'stop talking' can be based not only on the adjective *čev* 'silent, not talkative' but also on the verb *čevnĭ* 'stop talking'. In these cases, we need not take a stance on which part of speech there is in the first constituent.

With respect to verbal anterior constituents, there is just one clear case: *tirmunnĭ* 'quiver, shudder' from *tirnĭ* 'tremble, quake'. In two other cases, the relationship is more complex: *čušmunnĭ* 'flare up' vs. *čušnĭ* 'hurt sy, damage', *žurtovmunnĭ* 'squeak once' vs. *žurnĭ* 'squeak'.

Of adverb-initial compounds, a lot more can be found:

(4) VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>duvmunnĭ</i>	become motionless, stare sy out	motionless
<i>įrsmunnĭ</i>	spring up, start running, run away	suddenly, fast
<i>puś-pašmunnĭ</i> ⁹	get broken, break to pieces	to pieces
<i>ruz-pažmunnĭ</i>	collapse, fall to pieces	in every direction; (dial.:) to pieces
<i>ruz-razmunnĭ</i>	collapse, fall to pieces	in every direction; (dial.:) to pieces
<i>šįrkunnĭ</i>	fall down lifeless, collapse	lifelessly
<i>šuv-šavmunnĭ</i>	disperse, break up	dispersedly
<i>šuvk-šavkunnĭ</i>	disperse, break up	dispersedly
<i>šaj-pajmunnĭ</i>	be astonished, get confused	confusedly, disconcertedly
<i>šļvmunnĭ</i>	pass swimming/in silence	swimming, in silence
<i>tračmunnĭ</i>	crackle, make a cracking sound	with a crack
<i>turbįlmunnĭ</i>	fall down head over heels	head over heels
<i>vuś-vašmunnĭ</i>	talk under one's breath	whispering

⁹ Reduplicative first constituents are only considered where they are also used on their own. If only half of them are used independently, and a semantic relation

Again, in a large majority of examples, the verb expresses getting into the state specified by the adverb. On the other hand, in the case of *šljivunnî* and *turbîlmunnî*, the verb partly retains its meaning: it expresses motion. There are, again, a few unclear cases: *tur-barmunnî*, *tur-bormunnî* ‘have a row, start arguing’, *tur-bar*, *tur-bor* ‘(speak) fast, hardly understandably’.

The number of cases in which the anterior constituent can be identified with some onomatopoeia and the compound verb expresses that the given sound is being emitted is also considerable:

(5)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>bul-bolmunnî</i>	splash, bubble up	sound of bubbling
	<i>bursmunnî</i>	dip into a dust-like substance	sound of dipping into dust ¹⁰
	<i>gerc-gercmunnî</i>	quack	sound of quacking, quack!
	<i>gil-golmunnî</i>	rattle, clang, rustle	rattling sound
	<i>golmunnî</i>	rattle, clang, rustle	sound of metal rattling
	<i>golsmunnî</i>	rattle, clang, rustle	rattling, creaking sound
	<i>gul-s-golsmunnî</i>	rattle, clang, rustle	rattling sound
	<i>kammunnî</i>	start knocking	knocking
	<i>kažmunnî</i>	crack	cracking, crick-crack
	<i>kočmunnî</i>	hit sg with a thud	thud, pat!
	<i>klopmunnî</i>	bang, clack, go plop	bang!, plop!
	<i>kovmunnî</i>	start rattling, bang	bang!, plop!
	<i>kuv-kovmunnî</i>	bang	bang!, plop!
	<i>ločmunnî</i>	crack once	sound of joints cracking
	<i>lujk-lajkmunnî</i>	swing, stagger	swinging, staggering
	<i>ruč-račmunnî</i>	crack	act of cracking
	<i>škovmunnî</i>	boom, bang, crack	bang!, plop!
	<i>škov-škovmunnî</i>	a big bang can be heard from far	bang!
	<i>šlopmunnî</i>	bang (door), go plop	bang!, plop!
	<i>tič-točmunnî</i>	knock, rap	knock knock, rat-a-tat
	<i>tričmunnî</i>	crack, snap, click	sound of breaking
	<i>tolsmunnî</i>	splash, spill, squirt	sound of splashing
	<i>vuz-vazmunnî</i>	crack once	cracking, crick-crack

With these examples, too, we can observe that the verb does not only refer to the sound emitted but also to some event that is accompanied by the sound concerned. There are cases where the latter is the dominant piece of meaning:

can be assumed between that half and the compound verb, I will indicate in the third column which half of the reduplicative first constituent is involved.

¹⁰ It is conspicuous how much this item resembles the noun *bús* ‘dust’ that forms a similar compound verb. (Nikolai Kuznetsov tells me the verb can also refer to the sound of dipping into water — in that case, the relation is even more dubious.)

(6)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>buz-bazmunni</i>	fall into (with a sound)	sound of splashing
	<i>čarsmunni</i>	catch fire	sound of a match being struck
	<i>žummunni</i>	swish, scuttle, scurry	sound of scuttling
	<i>dižmunni</i>	fall over, overturn with a sound	bang! plop!
	<i>gil-golmunni</i>	get broken, break to pieces	rattling sound
	<i>golmunni</i>	get broken, break to pieces	sound of metal rattling
	<i>jirkmunni</i>	fall down with a sound, fall over	knocking sound
	<i>jirk-jirkmunni</i>	fall down with a sound, fall over	knock knock!
	<i>kažmunni</i>	split, crack	cracking
	<i>kolsmunni</i>	hit sg with a thud, split, crack	sound of thud, clack
	<i>kovmunni</i>	hit sg with a big thud	bang!, plop! crack!
	<i>šlopmunni</i>	burst, spring open; splash into	bang!, plop!
	<i>šlapmunni</i>	fall into, splash into; collapse	plop!
	<i>šlopmunni</i>	fall into, splash into	plop!
	<i>šmotmunni</i>	get off, alight, fall down	plop! bang!
	<i>švačmunni</i>	crack, break, fall, fall down	sound of cracking, rattling
	<i>švuč-švačmunni</i>	fall with a sound, fall down	plop!
	<i>tersmunni</i> I.	get broken, break to pieces	sound of breaking
	<i>tur-tarmunni</i>	be startled, stagger	knocking, loud
	<i>tivkmunni</i>	fly away (e.g., arrow)	up!, oops!
	<i>topmunni</i>	drip, dribble	drip-drip!
	<i>tuvmunni</i>	swish in, scurry in somewhere	sound of scuttling
	<i>vazmunni</i>	break in, break out, force in (glass)	cracking
	<i>zižmmunni</i>	fall down with a knock, fall down	bang! plop!
	<i>ziřk-ziřkmunni</i>	bump (on a road with potholes)	ziřk: sound of rumbling
	<i>zur-zarmunni</i>	bump into, collide with	with a sound, cracking
	<i>zurk-ziřkmunni</i>	bump (on a road with potholes)	with a sound, cracking
	<i>žbirmunni</i>	fly up, fly out, fly away	waft of wings
	<i>žbirkmunni</i>	fly up, fly out, fly away	waft of wings

There are, furthermore, some cases in which the effect of Russian verbs (most of them derived from onomatopes) can be observed:

(7) VERB	MEANING OF THE VERB	CORRESPONDING RUSSIAN VERB
<i>brížmunni</i>	squirt apart (e.g., raindrops), splash	<i>брызнуть</i>
<i>dregmunni</i>	quiver, shudder, tremble	<i>дрогнуть</i>
<i>drežmunni</i>	quiver, shudder, tremble	<i>дрожать</i>
<i>jokmunni</i>	throb	<i>ёкнуть</i>
<i>kačmunni</i>	swing, stagger, topple	<i>(по)качнуться</i>
<i>očmunni</i>	come to, regain consciousness; grasp, see	<i>очнуться</i>
<i>razmunni</i>	collapse, fall to pieces	<i>раз(валиться?)</i>
<i>trešmunni</i>	crack, split, get broken	<i>треснуть</i>
<i>zdregmunni</i>	shudder	<i>воздрогнуть</i>

The first constituents occurring in these examples are not loanwords proper: they are not used on their own as any part of speech (one could say that some Russian verbs were borrowed into Komi as anterior constituents of compounds; in other words, they were completed with a posterior constituent rather than with a derivational suffix). Especially noteworthy is the verb *brížmunni* ‘squirt apart’ as there is a Komi onomatopoe *bríž* ‘bang!, plop!': that is, the similar-sounding Russian verb overtrumps the expected, semantically transparent meaning.

Similar cases can be found elsewhere. For instance, *luv-lav* is an onomatopoe meaning the barking of a dog (‘bow-wow’); the meaning of *luv-lavmunni* is nevertheless ‘be heard from a distance, sound in a distance’. The mewling of a cat (‘miaow’) is *ńav*, yet the only meaning of *ńavmunni* is ‘catch fire’.

The overwhelming majority of anterior constituents of compound verbs ending in *munni* cannot be identified with any word used on its own.¹¹ Also, verbs with an identifiable first constituent may have meanings that are unrelated to that of the first constituent. It is conspicuous, however, that verbs with an unidentifiable anterior constituent often have meanings similar to those with an identifiable anterior constituent. We could say that compound verbs tend to have typical meanings.

Examples of such meanings include the following.¹²

¹¹ In this paper, obviously, only the material of the dictionary can be taken into consideration: it is imaginable that some first constituents that we take to lack an independent use do have one but it does not, for some reason, appear in the dictionary.

¹² It is highly likely that the compounds involving the anterior constituents listed are not fully synonymous; the core of their meaning is nevertheless the same.

Verbs of sound emission: 'crack (grind, creak)': *žaz-*, *jars-*, *kov-*, *krač-*, *kroč-*, *luč-lač-*, *ńaz-*, *roč-*, *ruz-raz-*, *širk-*, *šark-*, *šur-šar-*, *šars-*, *šloc-*, *trač-*, *troč-*, *vars-*; 'rattle, cling': *brin-*, *žil-*, *žil-žol-*, *žol-*, *žolk-*; 'peal forth, toll, resound': *iz-*, *jur-*, *jurk-*, *trin-*, *tron-*; 'squirt, splash, splutter': *priš-*, *šar-*, *šav-*, *šavk-*, *šol-*, *šul-šal-*.

Motion verbs: 'tremble, shudder': *čur-*, *čur-čer-*, *ilk-*, *irk-*, *irs-*, *kez-*, *oč-*, *pirk-*, *tirk-*, *tur-tar-*; 'fall down, fall over': *čur-čer-*, *iz-*, *las-*, *švac-*, *švuls-*; 'tilt, tip, roll over, tumble over': *čer-*, *kyp-*, *lajk-*, *šatov-*, *šutov-šatov-*, *tur-tar-*; 'start running, run away, rush away': *brins-*, *viš-*, *viž-*, *živ-*.

Verbs denoting physical change of state: 'get broken, break to pieces, fall apart, split': *čuž-čaž-*, *kov-*, *paž-*, *švac-*, *tač-*, *žil-*, *žil-žol-*, *žol-*, *žolk-*, *žul-*; 'collapse, tumble down': *iz-*, *šlap-*, *val-*, *var-*, *vark-*; 'catch fire; burn down': *čaž-*, *čiš-*, *iz-*, *ńaleb-*,¹³ *ńav-*, *ńuv-ńav-*; 'burn out': *čis-*; 'get torn, get ragged': *čaš-*, *čaž-*, *šlap-*; 'get crooked, bend, stoop': *čukir-*, *ńukir-*, *ńukir-ńakir-*, *turbil-*; 'open': *kalk-*; 'subside': *lap-*, *las-*, *šmot-*, *šnap-*; 'droop, sag, wither, become limp': *kil-*, *ńar-*, *rop-*.

Verbs denoting a psychological/physiological change of state: 'start crying': *čukir-*; 'start smiling': *šeš-*, *šin-*, *žer-*; 'lose strength, weaken, become weary': *čuš-*, *liž-*, *las-*, *lizgir-*, *majis-*, *ruž-*; 'fall asleep': *lizgir-*, *ńirov-*, 'growl, snarl, scowl': *čoš-*, *iš-*.

The individual categories are not clearly separable (e.g., drooping is a change of shape and a sign of weakening at the same time); and the individual verbs may have several meanings, often ones that do not exhibit any kind of relatedness.

Let us say a few words about anterior constituents. As we saw, most first constituents do not occur on their own. It appears that a *k* at the end of anterior constituents does not have a distinctive role: *dilmunni* ~ *dilkmunni* 'start feeling uneasy, start to be annoyed'; *rojmunni* ~ *rojkmunni* 'rot, moulder, burn to ashes'; *šavmunni* ~ *šavkmunni* 'jump away; squirt, spurt, scatter'; *ševmunni* ~ *ševkmunni* 'lie, stretch out, spread'; *šlivmunni* ~ *šlivkmunni* 'pass swimming, in silence'; *tarmunni* ~ *tarkmunni* 'knock, tap'; *tirmunni* ~ *tirkmunni* 'quiver, shudder'; *trinmunni* ~ *trinkmunni* 'ring, toll'; *varmunni* ~ *varkmunni* 'collapse; be down-trodden, be ruined'; *žolmunni* ~ *žolkmunni* 'rattle, clang, fall apart rattling'; *žbirmunni* ~ *žbirkmunni* 'fly up, take flight, fly away'. There are

¹³ Although there exists an adverb *ńaleb-en* 'burning, in flames', in which *-en* is the instrumental suffix.

also a few counterexamples: *ćermunnĭ* 'tremble, shudder' vs. *ćerkmunnĭ* 'tilt, tumble over'; *kĭlmunnĭ* 'droop, sag, wither' vs. *kĭlkmunnĭ* 'lose heart, sink'. Of reduplicative first constituents, there is not much to say: they are not very frequent, it is only in a few cases that one of the constituents is used on its own, and even then, no semantic relationship can be traced.

Nor is it possible to give a general meaning of the posterior constituent. The single feature that almost all verbs ending in *munnĭ* share is instantaneousness (and a concomitant perfective aspect): the verb invariably refers to the beginning or end of something or expresses a momentary event. (There is an exception here, too: one meaning of *varmunnĭ*, *varkmunnĭ* is 'be downtrodden, distorted, ruined, compressed'.) In addition, the subject tends to be a patient or experiencer, rather than an agent.

2.3. Compounds ending in *kĭvnĭ*

The corpus contains a total of 178 verbs whose posterior constituent is *kĭvnĭ*.¹⁴ The primary meaning of the verb is 'hear'; but it also occurs in the meanings 'feel; smell; listen to' as well as 'be heard; be felt'.

A formal feature of the compounds belonging here is that their anterior constituents almost exclusively end in *-a*. This is not some kind of linking vowel, and not part of the verb stem either, since it appears on both halves of reduplicative first constituents. Thus, in identifying the first constituent, that "thematic" *a* must be ignored (both *a*'s must be ignored in the case of reduplicative first constituents).

There are only two examples where the anterior constituent is unambiguously a noun: *dojakĭvnĭ* 'hurt, ache' : *doj* 'pain'; *južakĭvnĭ* 'crunch (said of snow)' : *juž* 'thick, dense, compact snow'. The connection between *sĭrkakĭvnĭ* 'quake, wobble, tremble' and *sĭrk* 'fringe' is a lot more uncertain.

An adjectival first constituent occurs in a single case: *ćažakĭvnĭ* 'crack, creak' : *ćaž* 'dry, cracking (e.g., twigs)'. There is also an uncertain case: *gerćkakĭvnĭ* 'gnash, grind (one's teeth)' : *gerć* (dialectal) 'clenched (teeth)'. The lack of *k* in the adjective is not an insurmountable difficulty given that, as we saw with *munnĭ*-final compounds, *k* of-

¹⁴ The verb *kučĭkĭvnĭ* 'hit' cannot be part of this set given that it is not a compound whose last constituent is *kĭvnĭ* but rather a form of *kučĭkĭnĭ* 'hit' involving the instantaneous suffix *-ĭv*.

ten occurs without any function in compound verbs: the same applies to *kiŋni*-final ones. Another minor problem is that the adjective *gerc* only appears dialectally; the main problem is that the onomatope *gerc* 'sound of grinding' is classified as non-dialectal (which in this context must mean that it occurs in at least a majority of dialects). Hence, at least synchronically, it is more likely that the compound is related to the onomatope, not the adjective.

We have two examples of verbal first constituents: *iška-poškakiŋni* 'pant, gasp, breathe' : *iškini-poškini* 'id.'; *šepkakiŋni* 'keep whispering' : *šepkini* 'whisper'. The verb *tačkakiŋni* 'knock, tap, rap, clatter, flap' can also be related to the verb *tačkini* 'id.', but both can be derived from the onomatope *tač* 'knock! pat!', too.

On the other hand, there are a few cases in which we can recognize an adverbial first constituent (obviously by ignoring "thematic" *a*). These adverbs, in turn, are in almost all cases of an onomatopoetic character. (Except for *izakiŋni* 'blow (wind), be draughty'; but the relation of this verb to the adverb *iz* 'wide open' is uncertain. A similar case is *tura-barakiŋni* 'mumble, murmur' : *tur-bar* '(speak) fast, unintelligibly'.) Given that adverbs of an onomatopoetic meaning are difficult to tell apart from onomatopes, both categories will be presented together:

(8)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>bulska-bolskakiŋni</i>	splash into; chomp, squelch	<i>buls-bols</i> sound of squelching/splashing
	<i>bula-bolakiŋni</i>	bubble	sound of bubbling
	<i>bulska-bolskakiŋni</i>	splash, lap, sprinkle	<i>buls-bols</i> sound of bubbling
	<i>žurkakiŋni</i>	grate, burr	sound of burring
	<i>gira-garakıŋni</i>	rumble, rattle	in a rumbling/rattling manner
	<i>golakiŋni</i>	jangle, rattle	sound of metal rattling
	<i>golskakiŋni</i>	jangle, rattle	rattling, creaking
	<i>grıma-gramakiŋni</i>	thunder, rumble, rattle	<i>grıma-grama</i> in a thundering/rattling manner
	<i>gula-golakiŋni</i>	rattle, jangle	clinking, knocking, rattling
	<i>izakiŋni</i>	seethe, splash; splash about	splashing
	<i>izakiŋni</i>	buzz (beetle)	buzzing
	<i>kirkakiŋni</i>	knock loudly, clack, rattle	knocking, tapping, knock knock
	<i>jırka-kamakıŋni</i>	knock loudly, clack, rattle	noisily, loud
	<i>jırka-tarkakiŋni</i>	knock loudly, clack, rattle	knocking, tapping, knock knock
	<i>kažakiŋni</i>	crack, crackle, grate	in a cracking/grating manner

(cont.)

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>klopakívní</i>	keep flapping, hitting, beating	plop! bang!
<i>klopkakívní</i>	keep flapping, hitting, beating	<i>klop</i> plop! bang!
<i>kílonakívní</i>	sound, be heard	clinking, knocking, rattling
<i>kíluna-kílonakívní</i>	thunder, rumble, rattle, clack	sounding hollow, rattling, clacking
<i>kočkakívní</i>	walk pattering, be heard (knock)	pattering, knocking
<i>kovakívní</i>	thunder, rumble, rattle	plop! bang!
<i>kuvakívní</i>	be heard dully	bang! plop!
<i>kuža-kažakívní</i>	crack, crackle, grate	cracking, grating
<i>ločkívní</i>	crack (joints)	sound of joints cracking
<i>luča-lačakívní</i>	crack, burr; break with a crack	loudly
<i>račkakívní</i>	burr; break to pieces with a crack	cracking
<i>škovakívní</i>	thunder, rumble, crack	bang!
<i>šmotakívní</i>	bump into, splash into	plop! bang!
<i>tačkakívní</i>	knock, patter, clatter, crack	<i>tač</i> crack! knock!
<i>tička-táčkakívní</i>	knock, clatter	<i>tič-táč</i> rat-a-tat!
<i>trička-tračkakívní</i>	crack, burr; break with a crack	<i>trič</i> snap!
<i>trina-tronakívní</i>	reverberate	reverberating, sounding hollow
<i>ura-varakívní</i>	growl	noise, din
<i>uva-avakívní</i>	noise/din can be heard; shout	noise, din
<i>vazakívní</i>	crack, is compressed cracking	in a cracking manner
<i>zimakívní</i>	bump; walk pattering	bang! plop!
<i>zirkakívní</i>	crack/thunder can be heard	thunder, roar, cracking
<i>žbīrakívní</i>	flutter, fly about	waft of wings

As can be seen, the onomatope (adverb) can be related to the verb ending in *kívní* in various manners: the compound can refer to the emission of the sound concerned or to an event during which the given sound is produced; the onomatope involved sometimes does not specify the type of sound, it just suggests loudness; in other cases, it only partially corresponds to the sound referred to by the verb. Next, we list cases in which the verb denotes some other sound than the first constituent does in itself:

(9) VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>brunakívní</i>	hum, purr, whirr, buzz	bang! plop!; splashing
<i>ženakívní</i>	toll, tinkle, jangle	bang! plop!
<i>žurskakívní</i>	knock, crack, clatter	squeaking
<i>gurakívní</i>	rumble; rattle, clatter	crunching, clattering, jangling
<i>švačkakívní</i>	squeak, crunch, creak	jangling, plop! bang! knock!
<i>vura-varakívní</i>	rumble	fast, with a swing

In addition, we have to consider cases in which the verb does have a meaning that corresponds to that of the first constituent, but it also has some that do not. The verb *izakivni*, presented earlier, does not only mean 'seethe, bubble, splash; splash about' and 'buzz (beetle)', both corresponding to *iz*, and the dubitably corresponding 'blow (wind), be draughty', but also 'make a noise/racket' and 'chatter, babble'.

There are, again, some verbs ending in *kivni* that are paralleled by a Russian verb:

(10)	VERB	MEANING OF THE VERB	CORRESPONDING RUSSIAN VERB
	<i>čavkakivni</i>	chomp, smack, squelch	<i>чаевать</i>
	<i>pal'skakivni</i>	splash, sprinkle	<i>плескать</i>
	<i>ropkakivni</i>	grumble, grouse, be grumpy	<i>ронмать</i>
	<i>šarkakivni</i>	shuffle one's feet, rustle, sough	<i>шаркать</i>

The remaining verbs have some typical meanings here, too: 'crack, crackle, grate, squeak': *čala-*, *čarska-*, *čaža-*, *čuža-čaža-*, *žaza-*, *žaža-*, *žiža-žaža-*, *žuža-*, *žuža-žaža-*, *giža-gaža-*, *jarska-*, *kova-*, *kračka-*, *kroža-*, *mučka-*, *murčka-*, *murka-*, *murć-murć*,¹⁵ *náza-*, *ňaža-*, *ňuza-ňaza-*, *ňuža-ňaža-*, *ročka-*, *ručka-*, *ručka-račka-*, *ruza-raza-*, *šara-*, *šarka-*, *špora-*, *špura-špora-*, *tačka-*, *tračka-*, *tračka-*, *tručka-tračka-*, *vurka-varka-*; 'jangle, toll, tinkle': *bríña-*, *bruna-brona-*, *žína-*, *žínka-*, *gíla-góla-*, *kona-*, *tarka-*, *tiña-*, *trana-*, *troña-*, *truna-trona*, *turk-tark*,¹⁶ *žatka-*, *žiła-*, *žiła-žóla-*, *žiña-*; 'rustle, sough, whisper': *čarska-*, *čírka-*, *kíša-*, *kíša-kaša-*, *íša-poša-*, *šara-*, *špora-*, *špura-špora-*, *šura-*, *šura-šara-*; 'hiss, fizzle': *mura-*, *žaza-*, *žaža-*, *žiža-žaža-*; 'chirp, pip, peep': *čípka-čúpka-*, *číva-luva-*, *čuva-čava-*, *žíva-*, *tiña-*; 'splash, sprinkle, lap': *solka-*, *šála-*, *šálka-*; 'break with a cracking noise': *kračka-*, *kreča-krača-*, *račka-*, *ručka-*, *ručka-račka*, *špura-špora-*; 'mutter, mumble': *nama-*, *numa-*, *numa-nama-*; 'flutter, fly about': *pura-para-*, *purka-parka-*, *špora-*, *šura-*.

Once again, no total synonymy is involved; for instance, *jarskakivni* belongs to the 'crack, grate' group, but is only used for noises made while chewing; while *kovakivni* is only used for noises caused by cold weather. The list is not exhaustive but it shows quite clearly that primarily verbs of sound emission and verbs denoting events involving sound emission belong here. There are just a few exceptions like *mojakivni* 'hurt, ache' (rhyming with the synonymous *dojakivni*). (It is debatable

¹⁵ In this case, the *a* is missing.

¹⁶ In this case, the *a* is missing.

whether *špura-šporakivni* 'swing, sway, shake, flutter' or *švirkakivni* 'spin fast, twirl, make circles' belong to the exceptions since we do not know if they can be applied to movement without a noise.)

As can be seen from the foregoing, this verb partly retains its basic meaning in the compounds in that it mainly occurs as last constituent of verbs related to sound. We have to point out, however, that in its independent uses it may not only refer to the perception of sounds; also, in that case, its primary meaning is 'hear' rather than 'be heard' and never 'make heard'. Therefore, we have to conclude that the independent uses of this verb and its uses as a last constituent of compounds are rather distinct.

It is a general feature of verbs ending in *kivni* that they refer to events that take some time (or are repeated in rapid succession),¹⁷ their Russian equivalents are imperfective verbs, and they are all intransitive.

With respect to first constituents it can be observed that certain anterior constituents of similar shape¹⁸ result in verbs of similar meaning — although exceptions are numerous. In the case of reduplicative forms, their first part usually contains a high vowel (*i, u*), whereas their second part contains a mid or low vowel (*o, a*); again, there are exceptions. The rest of the sound shape rarely varies. As to the independent occurrence of reduplicative anterior constituents, in some cases the first, and in some other cases the second part occurs on its own or in other compounds ending in *kivni*; or else both are, or neither.

2.4. Compounds ending in *vižni*

The corpus contains a total of 150 verbs whose posterior constituent is *vižni*. The primary meaning of the verb, used on its own, is 'defend, guard, watch'. In addition, it also occurs in the meanings 'save up', 'hold (in one's hand)', 'keep (an animal)', '(turn out to) graze', etc. The dictionary contains another verb *vižni*, in a separate entry, meaning 'spend (money)', 'use (up)'.

Some compounds have a noun as their anterior constituent:

¹⁷ Except *čunakivni* 'one's ears are buzzing; shoot once, stab once, hit strongly, slap'.

¹⁸ The difference is usually not more than a single phoneme, e.g., a different vowel, an added *k*, or reduplication.

(11)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>čutvižni</i>	be seen (said of a solitary object)	point
	<i>žarvižni</i>	shine, glitter, glisten	light
	<i>žuvvižni</i>	filter in (light)	ray/beam/spot of light
	<i>jokmižni</i>	lie sprained, contorted	knot, gnarl
	<i>kižvižni</i>	answer	word
	<i>kopižvižni</i>	be in a bent position	bow
	<i>nukžvižni</i>	be downcast with pain	spasm
	<i>numvižni</i>	smile	smile
	<i>šer-šervižni</i>	look gaudy	šer pattern, colouring, frill, etc.
	<i>špižni</i>	smile	smile
	<i>vašvižni</i>	smile	smile (dialectal)
	<i>vezvižni</i>	hang (like a thread)	thread

There are some uncertain cases, too. The meaning of *jošvižni* is 'protrude, jut out, be conspicuous' but that of *još* is 'thorn, prickle; sharp, pointed small stick; knitting-pin'; *kejvižni* means 'sit curled up' but *kej* means 'little white vermin, mite (in meat)'; *nimvižni* is 'start speaking' but *nim* is 'name'.¹⁹ In these cases, the connection between the noun and the compound verb cannot be excluded but it is semantically more or less problematic. On the other hand, the connection between *jugvižni* 'shine, glitter, glisten etc.' and *juger*, *jugid* 'light' is semantically clear but the first constituent of the compound is a bound stem.

There are somewhat more examples of adjectival anterior constituents:

(12)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>čatervižni</i>	look up, walk with one's head tossed back	bending back, bent back
	<i>čošvižni</i>	take note of, prick up one's ears	light
	<i>čemvižni</i>	stand like a wall	dense, solid
	<i>donvižni</i>	be clear (sky); gleaming and spotless	clean, empty
	<i>duvvižni</i>	stand motionless, do nothing	motionless
	<i>gerdvižni</i>	become red, be red	red
	<i>ježidvižni</i>	be white	white
	<i>kalkvižni</i>	be half-open	half-open
	<i>lasvižni</i>	lie low; sing small	smooth, plain, flat
	<i>ležvižni</i>	be blue	blue
	<i>muržvižni</i>	sit grumpily, scowl	grumpy, gloomy
	<i>pašvižni</i>	be open wide	wide open
	<i>šėdvižni</i>	be black	black
	<i>vekšvižni</i>	grimace, pull faces	crooked, distorted

¹⁹ The connection would be more transparent if the verb meant 'address, start speaking to'.

(cont.)

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>vežvižni</i>	be green	green
<i>vežavižni</i>	feel ashamed; be modest, be polite	holy
<i>vižvižni</i>	be yellow	yellow
<i>zumšvižni</i>	scowl; cloud over	gloomy, sad; cloudy
<i>žanvižni</i>	be open, uncovered, undone	open
<i>žugilvižni</i>	be sad, grieve, mope	sad, mournful, woeful

A less certain case is *lapvižni* 'squat; sit doing nothing, sing small': *lap* 'short of stature (dialectal)'. The bound stem of *ježid* 'white', that is, *jež*, also occurs as a first constituent: *ježvižni* 'be white'.

Here are a few compounds with an adverbial first constituent:

(13)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>bronvižni</i>	be motionless; stand like a column	motionless
	<i>goŋvižni</i>	sit/lie with head up, crane one's neck	craning the neck
	<i>guvvižni</i>	be open wide	wide open
	<i>plaštvižni</i>	lie outstretched, prostrated	flatly, evenly
	<i>plavvižni</i>	lie on water, spread, stretch	swimming
	<i>tanvižni</i>	stand like a column, like a pillar of salt	dumbfounded, rooted to the spot

The following case is a special one: *ćusvižni* 'hardly glow/burn/give warmth; can hardly be seen, give a little light, flicker' : *ćus* 'totally, perfectly'. On the basis of the independent meaning of the first constituent, one would expect the verb to mean an increased, intense degree of something; but what we find is just the opposite.

The rest of the verbs fall into typical semantic classes again. However, here we can observe a peculiar zone of interrelated meanings:

'do nothing, sit/be unoccupied': *brun-*, *dič-*, *diž-*, *lajk-*, *laš-*, *laž-*, *lap-*, *šiŋ-*, *šlap-*, *šlip-*, *šlop-*, *šlap-*, *šmiŋ-*, *švač-*, *tič-*, *zič-*, *zuč-*, *žbot-*, *žmot-*. Specific subcases of this:

'sit with clasped hands': *guŋ-*, *sič-*, *tjt-*;

'sit and stare at one point': *gud'*-;

'lie, rest, unbend oneself': *nuž-*;

'sit in silence, modestly': *rum-*;

'loll about, laze': *žuj-*.

Another meaning that is close to the above:

'stand/be motionless; do not move': *brun-*, *brut-*, *but-*, *diž-*, *gip-*, *šlap-*, *šňap-*, *šňoć-*, *šňop-*, *švać-*, *toč-*, *tran-*, *tuč-*, *žbot-*. Its specific subcases are:

'stay somewhere for a longer period': *žbot-*, *žmot-*;

'lie motionless': *žbut-*.

Yet another meaning close to the above:

'be upright, tower above, protrude, jut out, pierce out': *čer-*, *čur-*, *žav-*, *žir-*, *diž-*, *dovk-*, *duv-*, *gir-*, *gevk-*, *šar-*, *šav-*, *šev-*, *šljp-*, *šlop-*, *šlap-*, *švać-*, *ton-*, *tor-*, *tork-*, *tran-*, *trin-*, *tut-*, *top-*, *zim-*, *zum-*, *zumbir-*. A specific subcase is:

'stick out, stand on end (hair)': *čoš-*, *čuč-*, *žar-*, *šav-*, *zar-*, *zars-*; and another one is 'sit ruffling up its feathers': *puzgir-*.

What protrudes or sticks out

'can be seen clearly, from a distance': *žav-*, *žir-*, *dev-*, *eč-*, *ers-*, *eš-*, *gevk-*, *gol-*, *šar-*. A specific subcase is

'exhibit oneself in public, sit in a place that can be seen well': *žirk-*.

But it is not only what sticks out that is clearly visible:

'stretch out, sprawl, run through': *čer-*, *dev-*, *guv-*, *iz-*, *luz-*, *nuž-*, *pav-*, *ševk-*, *šilk-*, *šivk-*, *šlin-*, *šljp-*, *šliv-*, *šlivk-*, *šlivk-*; 'be uncovered, be open, gape': *eč-*, *ers-*, *eš-*, *jars-*, *up-*, *van-*; 'burn (be in flames, flicker)': *čus-*, *ir-*, *žuz-*.

Another, much smaller group of semantically connected compound verbs is: 'sit or lie hunched up': *ježgil-*, *kutkir-*, *puzgir-*; 'bend, bow, stoop': *gumbir-*, *tingir-*, *vučkir-*; 'squat': *kekur-*, *lajk-*, *laš-*, *laž-*, *ničil-*. There are examples of the opposite meaning, too: 'lie outstretched, prostrated': *čer-*, *luž-*, *nuž-*.

A few more, typical meanings: 'look grumpy, knit one's brows, frown, scowl': *čoš-*, *duz-*, *zumbir-*; 'smile': *pit-*, *šeš-*, *šin-*, *šmijn-*; 'be clean, smart, orderly': *ševk-*, *šilk-*, *šivk-*, *šlin-*, *šljp-*, *šliv-*, *šlivk-*. The opposite of the last group: *turbil-* 'be desolate'.

It is conspicuous that while for verbs ending in *munni* or *kivni* onomatopoeic meanings dominated, in this group there is not a single example of that. On the other hand, compound verbs that refer to 'seeing' abound. This is not really connected with the present meanings of

vižni, but it can be assumed that the earlier meaning of this verb must have been ‘see’²⁰ (today, another verb derived from the root *viž-*, namely *vižedni*, is used in that meaning). At any rate, there is no direct semantic link today between the independent uses of the last constituent and those in compounds. Aspect is characteristic again, verbs ending in *vižni* express continuous/durative events or states. (Exceptions can be found again: one meaning of *duvvižni* is the same as that of *duvmunni*: ‘freeze, jellyfy’.)

Reduplicative first constituents cannot be found; there is a single instance of doubled anterior constituent: *šer-šervižni* ‘look gaudy’. Functionless *k* is found in fewer cases than its lack.

2.5. Compounds ending in *kerni*

The corpus contains a total of 82 verbs whose posterior constituent is *kerni*. The primary meaning of the verb, used on its own, is ‘do, make’. (Its secondary meanings refer to various processes of work.)

Very few instances of nouns can be found as first constituents:

(14)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>išlovkerni</i>	sigh (once)	sigh, breath, breathing
	<i>mičkerni</i>	have a short break	short break
	<i>numkerni</i>	start smiling	smile
	<i>suvtovkerni</i>	stop	stop, stopping
	<i>špiňkerni</i>	start smiling	smile

As a unique example, we have to mention a case with a pronoun as first constituent: *mijkekerni* ‘be watchamacalliting’ : *mijke* ‘something’ — this form is used when the speaker is temporarily unable to recall the required verb.

There is a single example of adjectival first constituent, and a somewhat uncertain one at that: *lug-legkerni* ‘fluff, relax’ : *lug-leg* ‘wobbly, battered’.

There are several examples of adverbial first constituents; all of them reduplicative:

²⁰ This etymology is given in Lakó (1967–1978) under Hungarian *vigyáz* ‘watch, guard’. The compounds suggest that, in Komi, the semantic change must have been a late development. In the Luza dialect this meaning is still preserved (Bartens 2000, 271).

(15)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>gumĩl-gamĩlkernĩ</i>	swallow, absorb, gulp down	hastily, fast
	<i>guñ-goñkernĩ</i>	look round, glance around	attentively
	<i>lujk-lajkkernĩ</i>	swing, stagger something	swinging, bouncing ²¹
	<i>purk-parkkernĩ</i>	complete some job fast	urgently, in haste
	<i>puš-paškernĩ</i>	break/smash to pieces	to pieces
	<i>šurk-šarkkernĩ</i>	do fast, hastily	fast, hastily
	<i>vur-varkernĩ</i>	eat fast, crunching	fast, dynamically
	<i>vuš-vaškernĩ</i>	whisper	under one's breath

Observe that while *šurk-šarkkernĩ* appears to be fully transparent,²² *gumĩl-gamĩlkernĩ* and *vur-varkernĩ* are given special extra meanings. Among the uncertain cases, we can mention *duv-dovkernĩ* ‘shake, sway, wag, dangle, give a swing, make swing’ that may be connected with the adverb *dov* ‘floating’.

There are also a few compounds whose first constituents are onomatopes or adverbs of onomatopoeic meaning. These tend to be reduplicative to begin with, or get reduplicated as anterior constituents:

(16)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>but-batkernĩ</i>	sound like an exhauster, puff	plop! bang!
	<i>čuš-čaškernĩ</i>	tear with a sound	loudly, noisily
	<i>gałs-gałskernĩ</i>	start clanking, start tolling	clanking, jingle
	<i>gerć-gerćkernĩ</i>	quack	quack!
	<i>gul-golkernĩ</i>	clank, toll	clinking, knocking, jingle
	<i>jirk-jirkkernĩ</i>	knock loudly, knock once	knock knock
	<i>klup-klopkernĩ</i>	hit, beat, lash	bang! pop!
	<i>koč-kočkernĩ</i>	knock, throb, clack	<i>koč</i> knocking, rapping, pat!
	<i>kuč-kočkernĩ</i>	tap lightly, hit	<i>kuč</i> knocking, rapping, pat!
	<i>šur-šarkernĩ</i>	crack, clatter	cracking
	<i>švuč-švačkernĩ</i>	hit loudly, strike	bang!
	<i>tup-tapkernĩ</i>	pat, tap	rat-a-tat!

There is a single case in which the anterior constituent is parallel to a verb stem: *ńam-ńamkernĩ* ‘eat’ : *ńamni* ‘id.’ — but in this case chances are that both come from the onomatope *ńam* ‘gulp!’.

²¹ Predicatively, *lujk-lajk* may also mean ‘wobbly, decrepit’; but this has no direct connection with the meaning of the compound verb.

²² The meaning of *kernĩ* is rather underspecified.

Russian effect on these compounds can only be seen in a single example: *tav-tavkerni* 'yap', cf. Russian *тявкнута*.

Here again, most first constituents are not used on their own. Typical meanings are as follows: 'knock, tap, snap, flip, smack, etc.': *čols-*, *šloč-*, *tač-tač-*, *tap-tap-*, *trač-*, *tuč-tač-*; 'crumple, compress, stamp on': *čumbir-*, *čambir-*, *numil'-namil'*, *numir-namir-*, *puš-paš-*; 'shake, sway, wag, dangle, give a swing': *duvk-dovk-*, *leg-leg-*, *let-let-*, *lug-leg-*, *lut-let-*, *pirk-*, *pirk-pirk-*, *šumir-šamir-*, *šutov-šatov-*; 'break with continuous cracking': *vur-var-*, *vurk-vark-*, *vuz-vaz-*; 'fumble, feel, touch': *kurmš-karmiš-*, *leg-leg-*, *lug-leg-*, *mulš-mališ-*.

Some meanings are only represented in one or two examples, but these meanings have already been seen in other compound verbs whose first constituents are not used on their own: *but-batkerni* 'mumble, mutter, say unintelligibly'; *žurkkerni* 'give a creak/squeak'; *gil-golkerni* 'rattle, ring, start jingling'; *numjovkerni* 'start smiling';²³ *šul-šalkerni* 'splash, lap', etc.

Verbs ending in *kerni* can be perfective and imperfective. An interesting pair in this respect is *lapkerni* and *lap-lapkerni*: both mean 'hit, strike, beat' but while the first means a single event, the second means a repeated one. It is, however, not usually the case that non-reduplicative items should refer to single (or perfective) acts whereas reduplicative ones should refer to multiple (or continuous) actions. In some cases, verbs ending in *kerni* and *munni* form synonymous pairs; nevertheless, the issue of synonymy of the posterior constituents does not arise, among other things, because the subjects of compound verbs ending in *kerni* are often agents.

The first constituents of compound verbs ending in *kerni* are mostly reduplicative ones.

2.6. Compounds ending in *vartni*

The corpus contains only 21 verbs whose posterior constituent is *vartni*. The meaning of the verb, used on its own, is 'hit; thrash'. Adverbial first constituents can be recognised in two cases: *purk-parkvartni* 'complete

²³ In this case, the meaning of the verb may be strongly influenced by the fact that the noun *num* 'smile' can be recognised in it and that *numjov* as a bound stem is used elsewhere, e.g., *numjovtas* 'a smile', *numjovtni* 'to smile'. Nevertheless, we have to discuss it here since the first constituent does not occur on its own.

some job fast' : *purk-park* 'urgently, in haste'; *puš-pašvartni* 'break to pieces' : *puš-paš* 'to pieces'.

It is not only in the last-mentioned example, but also in general, that the verb more or less retains its meaning. The meaning 'hit, keep hitting' is found with the following first constituents: *diž-*, *šlop-*, *švač-*, *švuč-*, *tač-*. The meaning 'break, crush under one's feet, compress' is even more frequent: *čaš-*, *čaž-*, *žag-*, *klop-*, *park-*, *paš-*, *prak-*, *puš-paš-*, *vaz-*. Of course, these forms are not perfect synonyms, they differ in their uses or shades of meaning, therefore the compounds can by no means be said to be transparent.

Even though they have a single example each in this group, typical meanings seen earlier occur here, too: *duzvarntni* 'get hurt, look grumpy, be dissatisfied'; *ipvarntni* 'catch fire, burst into flames'; *kalkvarntni* 'open slightly', etc.

Compounds ending in *vartni* are partly transitive, and their subjects tend to be agents. There are only two examples of reduplicative first constituents.

2.7. Compounds ending in *večni*

The number of verbs whose posterior constituent is *večni* is also low: 16. The meaning of the verb, used on its own, is 'do, make, deal with something'.

A nominal first constituent can only be found in a single case, and even that involves the component *šer* discussed in the case of *munni*-final compounds: *girdšervečni* 'beat sy until he bleeds' : *gird* 'blood'.

In three examples, the first constituent is an adverb: *čuš-čašvečni* 'tear apart with a sound' : *čuš-čaš* 'with a sound, with noise', *purk-parkvečni* 'complete a job fast' : *purk-park* 'urgently, in a hurry', *puš-pašvečni* 'break, smash to pieces' : *puš-paš* 'to pieces'.

It is conspicuous that some of the compounds are synonymous with verbs of the same first constituent but *kerni* as their last constituent: *čumbir-čambir-*, *čuš-čaš-*, *duvk-dovk-*, *gul-gol-*, *lut-let-*, *purk-park-*, *puš-paš-*, *tuvk-tuvk-*. The items *lug-legvečni* and *šur-šarvečni* only differ from the corresponding *kerni*-final verbs in that they are only used in the primary meanings of the latter. In fact, we can conclude that whenever the first constituent is the same, the two compound verbs will be synonymous. This is obviously not unrelated to the fact that the two last constituents at hand are synonymous themselves.

2.8. Rare posterior constituents

- (17) Compounds ending in *ležni* 'let, allow' (4):

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>lićežni</i>	loosen; subside, be dulled (pain) ²⁴	
<i>luñležni</i>	let down, lower, haul down	wilted, dangling (tail)
<i>ñivležni</i>	yield, surrender, give in	
<i>ñivkležni</i>	yield, surrender, give in	

In the last two cases, the first constituent may be related to the post-position *ñiv* 'along' and/or to the noun *ñivk* 'slope', but the connection is semantically unclear—at the same time, the presence or absence of *k* does not make a difference, and that makes the connection unlikely. The verb more or less retains its meaning in all four cases.

- (18) Compounds ending in *petni* 'exit, go out' (4):

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>gačpetni</i>	fall on one's back, turn onto one's back	on one's back
<i>kračpetni</i>	make a cracking sound	
<i>ñivropetni</i>	doze off, fall asleep	
<i>šujpetni</i>	weaken, lose strength	

The second and third examples are synonymous with the corresponding *munni*-final verbs.

- (19) Compounds ending in *šižni* 'penetrate; hit; affect sg/sy' (5):

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>čerepšižni</i>	shudder, quiver, tremble	rift for beam head
<i>ñumšižni</i>	start smiling	smile
<i>tinšižni</i>	resound, ring empty, boom	
<i>tiñšižni</i>	resound, ring empty, boom	ringing, tinkling
<i>tiñšižni</i>	resound, ring empty, boom	ringing, tinkling

²⁴ Cf. *lić oz ležli* 'bother, plague, do not leave sy alone'.

- (20) Compounds ending in *ruašni* ‘steam, fog over, get blurred’ (3):

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>jejruašni</i>	play the fool, romp, frolic; rage, be furious	crazy, fool, mad, lunatic
<i>kokniiruašni</i>	play the fool, be flippant	easy
<i>varuašni</i>	steam, let out steam	water

With respect to the last example, it is clear that the verb retains its original meaning. In the first two cases, metaphors are used (the connection between obscurity and foolishness is easy to see).

- (21) Compounds ending in *kutni* ‘catch, get hold of; hold’ (3):

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>jarkutni</i>	tear off (head of corn)	
<i>kikutni</i>	become engaged	hand
<i>kiŋkutni</i>	answer for, be responsible	word

In the first case, the verb retains its meaning (although the first constituent cannot be identified). In the second and third cases the verb apparently loses its original meaning. In fact, however, the connection between the two constituents of the compound is metaphorical (cf. Hungarian *kézfogó* ‘engagement; lit. hand-holding’, *tartja a szavát* ‘be as good as one’s word, lit. hold one’s word’): the connection is not obscure but is rather expanded while retaining transparency.

- (22) Compounds ending in *kajtni* ‘repeat’ (2):

VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
<i>okajtni</i>	be sighing, lament, groan	ow! ouch!
<i>ojkajtni</i>	groan, moan, be sighing, lament	ow! ouch!

The meaning of the compounds can be taken to be transparent; cf. Hungarian *jaj-gat* ‘lament, i.e., repeat “ouch, ouch”’. As Nikolai Kuznetsov has pointed out to me, however, these are more likely to be Russian loanwords (*оxамь, оўкамь*). The etymology of these words is therefore unclear: it is possible that both sources have contributed to the development of these words—synchronic analysis makes it possible for us to take them to be compound verbs.

In sum, in the case of posterior constituents appearing in just a handful of words the verbal posterior constituent usually more or less retains its meaning but the semantic relationship between first and last constituents is not always quite clear. The number of compounds whose anterior constituents are not used on their own is relatively high again.

2.9. Posterior constituents occurring just once

There are four cases in which the noun *kiv* 'word' occurs with four different last constituents (each of which belongs to the set of last constituents that only occur once): *kértavni* 'connect' : *kivkértavni* 'summarise results, draw a final conclusion'; *vežiřtni* 'cross, put across' : *kivvežiřtni* 'contradict'; *šetćini* 'yield, give in' : *kivšetćini* 'agree'. In the fourth case, the verb is not even used on its own: *řilidavni* (*řilid* 'along') : *kivřilidavni* 'agree' (rare)—in this case, then, we should assume a structure like $[[kiv + řilid] + av-]$ rather than $[kiv + [řilid + av-]]$. In all four cases, the compound is used metaphorically, but the meaning that the metaphor is based on comes about regularly from the components (cf. the discussion of *kivkutni* 'answer for, be responsible' above).

The meaning of *varuavni* is similar to that of *varuařni*, discussed above; except that whereas the subject of the latter is the thing that lets out steam, the subject of the former is steam itself (unfortunately, the dictionary does not provide sample sentences).

The verb *vužedni* 'carry across' takes a nominal first constituent: *gagvužedni* 'be nauseated; be disgusted; feel sick' (*gag* 'beetle, vermin, (dialectal:) pimple'). In this case, a shared connotation can be felt between the first constituent and the whole compound, but connection of the last constituent and the compound is unclear. Perhaps some kind of metaphorical use is involved here, too.

Another compound verb that involves a nominal anterior constituent is *lunpukni* 'gather for needlework during daytime'. The noun *lun* means 'day'; **pukni* is not used any more but its original meaning 'sit' can be recognised in its derivatives still used today: *pukavni* 'sit, be sitting', *puksa*, *puksen* 'while sitting', *pukřini* 'sit down', *puktini* 'make sit; make stand, put, place somewhere', *pukiřtni* 'sit for a short while', and other items derived from these. Thus, even though the last constituent is not used on its own, we have to take this to be a transparent compound (with a specialised meaning, of course).

We find a single case with adjectival first constituent, along with the verb *kiašni* 'hit': *kokńikiašni* 'be short-tempered, be quick with one's hand' (cf. *kokńi* 'easy'). The construction is rather transparent. Its structural analysis takes some care, however, since it can be not only [*kokńi* + [*ki* + *aś-*]] but also [[*kokńi* + *ki*] + *aś-*]. The noun *ki* means 'hand': the meaning of the latter structure is metaphorical, but then *kiašni* 'hit' itself is already that (or rather, metonymical).

There are a few examples of adverbial first constituents, too: taking the verbs *jurašni* 'grow a head (e.g. cabbage); cover; stack', *jurędni* 'direct, turn; turn over, turn upside down' and adding *uvlań* 'down(wards)' in front of them, we get the meanings 'turn round, turn a somersault, roll over' and 'turn sg round, make sg somersault, make sg roll over', respectively. Notice that while the two original verbs are not really similar in their meanings, the two compound verbs only differ in that one of them is medial, and the other causative. Since that difference corresponds to the meaning of the derivational suffix *-ęd-*, we have to discard the assumption that we have compounding here: the structure of the two words is [[*uvlań* + *jur*] + *aś-*] and [[*uvlań* + *jur*] + *ęd-*], respectively. (The noun *jur* means 'head', hence the construction is rather transparent.)

On the other hand, the last constituent is underived in *geğervoni* 'understand'. From the component parts (*geğer* 'round', *vonj* 'get, arrive') we would expect something like 'go a full circle, get round'. Again, we have a metaphorisation of the original meaning here.

There are other examples of adverb-initial compounds, too: *šaj-pajvajeđni* 'astonish, shock, surprise' (*vajeđni* 'bring', *šaj-paj* 'confused, in a puzzle'). The construction bears a striking similarity to Hungarian *zavarba hoz* 'confuse, lit. bring into confusion'. The root of this verb (*vaj-*) also appears as a last constituent: *parkvajni* 'be frightened, grow alarmed' (*vajni* 'bring', *park* is not used on its own).²⁵ If we compare the two compound verbs, we can see that one is causative, while the other is medial. Such a difference is not indicated in the dictionary between *vajni* and *vajeđni*, the two verbs appear to be synonyms. As we saw in the Hungarian parallel (*zavarba hoz*), there is no need to attribute *vajeđni* a causative meaning in itself. Given that there is no **šaj-pajvajni* 'be astonished, be shocked, be surprised', we have no reason to question that *šaj-pajvajeđni* is a compound verb.

²⁵ The noun *park* 'park' cannot be brought into connection with the anterior constituent.

The same stem appears in yet another peculiar form: *urvajtni* 'devour, gollop'. Neither *ur*, nor *vajtni* is used on its own. The element *-t* could be another causative suffix, but there is nothing to contrast the compound with (since there is no causativity in its meaning). In this case, we have to consider this form as the borrowing of Russian *ypcam* 'tear off' (Nikolai Kuznetsov's explanation).

Another derived last constituent can be found in *šampuritćini* 'embrace, clasp, hang on to'. The element *-ć-* can only be a reflexive suffix. The only transitive meaning of *puritni*, i.e., the only meaning in which it is able to take a reflexive suffix, is 'lug'. The meaning 'embrace, clasp' may not be very directly related to the expected meaning 'be lugged', there may be a metaphorical/metonymical connection between the two. The first constituent does not occur on its own, but there is a verb *šamavni* 'be injured/damaged'. Given that *-av-* ~ *-al-* is a rather productive derivational suffix that is quite often added to nominal stems in the meaning 'be (like) something', we can easily deduce a potential root *šam* 'injured, damaged'. But this does not help us make sense of the compound.

The last constituent of causative *ševpaškedni* 'swing, flourish; open wide, spread, expand' is *paškedni* 'widen', but its first constituent is unfamiliar. The meaning component of 'wideness, expansion' appears in both verbs. The last constituent of *čečkertni* 'make level, cut off, trim off; shorten, sever, crop' is *kertni* 'bind; (dialectal:) spin (yarn)', and its first constituent occurs in the meanings 'together; also'. In this case, the semantic features of the compound verb and those of the adverb/conjunction plus the verb used on its own seem to be opposed to one another: while the compound refers to dividing, separating, the constituents both express some kind of linking or joining. (Maybe the meaning of the compound should be interpreted as 'link by making similar'?) (Nikolai Kuznetsov thinks that the interpretation of the form as a compound is unfounded, although he does not suggest anything better. But he drew my attention to *čečkes* 'plain, straight, smooth, flat' and *čečkir*²⁶ 'trimmed flat and short' that are semantically close to *čečkertni*.)

Another peculiar case is that of *kilk-šerektini* 'burst out laughing' (cf. *šerektini* 'start laughing'; the first constituent is not used on its own), since this is the only case in which the dictionary has a hyphen between the first and last constituents. It is unclear why this item is any different from those spelt solid or from those spelt as two words.

²⁶ I have not found this form in any dictionary.

2.10. Pseudo-compounds

In the foregoing, we have already presented items that we could suspect to be compound verbs at first sight but that turned out, upon closer scrutiny, to be verbs derived from a phrase. In what follows, we will review cases in which a derivational suffix or a cluster of derivational suffixes happens to be homonymous with a verb. (We have already seen one such case: with respect to the form *kućkivni* ‘hit’ we claimed that it was not a compound but a derived form.)

2.10.1. Pseudo-compounds ending in *gini*

The sequence *gini* occurs at the end of quite a number of what seem to be compound verbs (the verb of the same form means ‘swarm, teen’). The element *g* is a relatively frequent verb forming suffix, regularly followed by epenthetic *i* (to avoid three-consonant clusters). On the other hand, in the verb *gini* the *i* is part of the root, not epenthetic, hence it is retained before vowel-initial suffixes, too. Therefore the homonymy of the root *gi-* and the suffix *-g(i)-* is not total, they just happen to be homonymous in their dictionary forms, by chance, as it were. In fact, there are no compound verbs whose last constituent would be *gini*.

2.10.2. Pseudo-compounds ending in *tɛdni*

The verb *tɛdni* means ‘know, be familiar with’. It is homonymous with the cluster of suffixes *t+ɛd*. Since phonotactically they do not behave dissimilarly, each case has to be semantically analysed. The table in (23) overleaf shows some of these.

It can be seen clearly that in most cases the verb stem ending in *-tɛd-* is paralleled by another verb stem ending in *-t-*, and the meaning difference either corresponds to the causative function of *-ɛd-* or there is no such difference (if the original meaning is of a causative character, too). In the case of *šektɛdni*, the addition of the suffix *-ɛd* results in elision of the vowel of the adjectival stem and the first of the two obstruents that have become adjacent undergoes voicing assimilation. (The same processes also apply when noun-forming suffixes are added to the same stem). In this case, then, *t* is part of the adjectival stem, and is underlyingly *d*, not *t*. For *jumovtɛdni*, there is no other (verbal) form it could be contrasted with, and it is formally conceivable that this single example should be a compound verb; however, it would be strange that in the only compound verb with *tɛdni* as its last constituent the meaning

(23)	VERB	MEANING OF THE VERB	MEANING OF THE FIRST CONSTITUENT
	<i>cezirtędni</i>	shudder, grimace (with disgust)	<i>cezirt-</i> V: wrinkle
	<i>žugiltędni</i>	worry, make uneasy	A: sad, <i>žugilt-</i> V: make uneasy
	<i>dorovtędni</i>	make sy falter, upset	<i>dorov-</i> V: bend, turn sg aside, tilt
	<i>žumovtędni</i>	make sweeter	A: sweet
	<i>mužitędni</i>	tire	A: tired, <i>mužit-</i> V: tire
	<i>ojbirtędni</i>	be sleepy	N: nap, <i>ojbirt-</i> V: doze off
	<i>svutędni</i>	make sy/sg stand (up)	<i>svut-</i> V: stand up, get up
	<i>šektędni</i>	trouble sy, incommode	<i>šekid</i> A: heavy; <i>šekta</i> , <i>šekted</i> N: weight, load
	<i>švutędni</i>	shake	
	<i>šatovtędni</i>	make falter, upset, swing	<i>šatovt-</i> V: make falter, upset, swing
	<i>šutovtędni</i>	take away, carry away	N: whistle; <i>šutovt-</i> V: whistle; go away, run away, escape
	<i>utovtędni</i>	take away, turn out to grass	<i>utovt-</i> V: go away, run away

of the posterior constituent would be identical to that of the homonymous cluster of suffixes (rather than to that of the verb used on its own). Therefore, even in this case, it makes more sense to claim that the cluster of suffixes is involved. The same is true of *jejtędlęni* 'play the fool, dupe sy' (cf. *jej* 'crazy, stupid').

2.11. Anterior constituents

As was seen in the foregoing, only some (a minority) of the first constituents of compound verbs occur on their own. However, this does not directly imply that they are not morphemes: it is well known that some morphemes never occur independently but are found in similar meanings in several word forms each. Such are, for instance, the bound stems of Hungarian onomatopoetic verbs: *patt-*: *pattog* 'crackle', *pattan* 'crack', *pattint* 'snap'; *kop(p)-*: *kopog* 'knock', *koppan* 'thud', *koppint* 'rap'; *röp(p)-*: *röpül* 'fly', *röppen* 'flush', *röpít* 'let fly', since the 18–19th-century language reform, also as a first constituent of compounds: *röppálya* 'trajectory', *röplabda* 'volleyball', etc.

In order to deny morpheme status of such items not occurring on their own, it is to be proved that they either occur in a single compound or they occur in several but with meanings that cannot be directly related to one another. This is easy to prove: more than half of all compound verbs have an anterior constituent that does not occur in any other compound.

This means that it is only about 145 first constituents that occur more than once.²⁷ Some of these also crop up as independent words, but then those occurring independently also include items that only occur once as an anterior constituent. (In addition, there are anterior constituents that do not occur on their own but do occur with derivational suffix(es) as well as in one or more compounds. But even stems that appear with derivational suffixes do not cover the whole set of anterior constituents that occur in a single compound and do not occur alone.)

In some cases, identity is beyond reasonable doubt. The compounds *ćumbir-ćambirkerni* and *ćumbir-ćambirvećni* both mean 'push down, tread down, crumple'; in the case of *čošmunni* and *čošvižni*, synonymy is observable in a number of hardly interrelated meanings: 'take notice, start listening; look grumpy, frown; roughen one's coat'. In other cases, synonymy is but partial: *šul-šalmunni* 'splash, lap', *šul-šalvećni* 'id.', but also 'rinse, flush out'; *ševkmunni* 'stretch, extend, range as far as, spread, lie about, lie spread-eagled', *ševkvižni* 'stretch, extend; have a nice and smart appearance'.

But it is not only full or partial synonymy that can suggest that a morpheme is present. There are some examples in which the meanings of two compound verbs are not the same but are nevertheless so close to one another that the connection between their anterior constituents cannot be denied. For instance, *ćuž-ćažmunni* 'fall to pieces cracking', *ćuža-ćažakivni* 'crack, creak, crunch'; *lićmunni* 'feel better, be more at ease', *lićležni* 'loosen, subside, be dulled (pain)'; *pirkmunni* 'be cold, be numbed with cold; tremble, shiver; wince', *pirkkerni* 'shake off, shake out'.

It is to be noted that with anterior constituents that occur in several compounds and whose meanings are also similar across compounds it is quite often the case that they also occur alone. On the other hand, there are instances in which formally identical anterior constituents cannot be identified as instances of the same morpheme: *ćermunni* 'tremble, shudder', *ćervižni* 'lie outstretched/sprawling; tower above, protrude, jut out, pierce out' (in similar meanings also *ćurmunni* and *ćurvižni*); *dovkmunni* 'stagger, be lodged; become unsatisfied', *dovkvižni* 'stand out, tower (building)', *dovkvećni* 'shake one's head; nod'; *parkvartni* 'break, smash, tread on; scatter, throw all over the place'; *parkvajni* 'get frightened, grow

²⁷ Exact calculation is made difficult by the issue whether reduplicative first constituents and their first or second parts occurring alone in another compound should be counted as the same or as different.

alarmed'; *šarmunnĩ* 'start swishing, rustling, buzzing', *šarakĩvni* 'swish, rustle, buzz', but *šarvižni* 'jut out, can be seen clearly'.

2.12. Summary

Komi-Zyryan compound verbs can be divided into two large groups. The first one comprises verbs whose posterior constituents often occur as posterior constituents of compound verbs. These are *munni*, *kĩvni*, *vižni*, *kernĩ*, *vartni*, *većni*. Such last constituents lose their original meanings and contribute no discernible meaning to the compound even if we just consider compounds involving first constituents that also occur independently and have a recognisable meaning of their own. Most first constituents, however, have no independent meaning at all; such compounds—though they tend to fall into typical semantic classes—express shades of meaning that do not follow from the meanings of their individual constituents. What we have to assume, therefore, is that the combination of first and last constituents has been lexicalised in these cases, with the last constituent itself carrying information that concerns the verb's Aktionsart and the thematic role of the subject at most (but even these are mere tendencies). The individual last constituents co-occur with first constituents of some specific character: thus, verbs ending in *kĩvni* are characterised by a "thematic" *a* after the first constituent, verbs ending in *vižni* or *vartni* normally have a non-reduplicative first constituent, while those ending in *kernĩ* tend to have a reduplicative first constituent. Some first constituents recur in several compounds but most of them only occur once; and even those that occur more widely carry some common meaning component (and are therefore to be reckoned with as morphemes) in part of the cases only. The number of compounds involving the individual last constituents also varies widely.

The other group comprises verbs whose last constituents only occur in one to five compounds each. In such compounds, the last constituent usually retains its meaning, and the relation between the two constituents often remains transparent, though the compound is used in a metaphorical sense in a number of cases.

3. An analysis of the compound verbs

3.1. Segmentation into morphemes

In analysing compound verbs, then, we have to discard the null hypothesis that the meanings of the anterior and posterior constituents are mechanically added up. This naïve idea cannot be generally upheld for most compounds: think of English examples like *windmill*, *water-mill*, *pepper mill*, *cylinder mill*, *praying mill*, *diploma mill*, etc. In these cases, we either have to say that in order to decipher the meanings, we have to rely on our (extralinguistic) knowledge of the world, or else that such compounds are lexicalised, their meanings are encoded in a precompiled form. (Or the two accounts can be combined in some manner.) Only a small subset of all compounds (like ones with the name of some material as first constituent, noun + noun compounds referring to some part-whole relation, compound numerals, etc.) are such that their meanings can be mechanistically computed from those of their individual components.

Given that, in the compounds under scrutiny here, the first constituent cannot be attributed any meaning of its own in most cases, the idea that extralinguistic knowledge might be relied on in their interpretation must be discarded to begin with. In a morpheme-based linguistic analysis, we should conclude that an overwhelming majority of Komi "compound verbs" consist of a single morpheme, that their meaning cannot be divided between their anterior and posterior constituents. What is more, we could conclude that whenever some kind of division seems to be possible, it is the exception rather than the rule; it is accidental, rather than typical. In fact, therefore, divisibility is but apparent even in such cases, what we really have are undivided single morphemes. It is obvious that such a move would seem to be too radical; but if we did not do that, we would draw a sharp distinction among verbs of similar meanings, sharing a number of properties, on the basis of whether or not the recognisable verbal morpheme in them is preceded by another recognisable morpheme. The material surveyed here does not warrant such sharp distinction.²⁸ It is, therefore, expedient to find a framework of analysis in which that strict demarcation (between one morpheme and two morphemes) is somehow absolved.

²⁸ For instance, in anterior constituents of *kivni*-final verbs, "thematic" *-a-* occurs irrespective of whether or not the first constituent is used on its own.

Before turning to a possibility of that sort, let me explain why in the title of this paper the term “compound verb” is given in quotes. Traditionally, we speak about a compound if two words that also occur separately join up to form a new word. With respect to most Komi “compound verbs”, this is out of the question since they cannot be divided into component morphemes. This problem was already discussed by Bloomfield in the famous *cranberry* case.²⁹ He argued that *cran-* has to be taken to be a morpheme³⁰ since, even though its meaning cannot be determined, it is clear what *berry* means and whatever is left over is ‘cran’, i.e., the meaning of *cran*. However, this example differs from the case at hand in that *cranberry* is the only problematic item among a number of *berries*, in all the other *berry*-compounds the first constituent can be recognised easily (although the meanings of the constituents are far from being mechanistically added up). In our case, however, unidentifiable “first constituents” form a majority, and the meanings of the posterior constituents cannot unambiguously be delimited, it is at most their forms that can be recognised. This fact raises the theoretical problem of how to tell apart exocentric compounds like Hungarian *lúdláb* ‘a type of dessert, lit. goose-foot’, *oroszlánszáj* ‘a type of flower, lit. lion-mouth’, *lócitrom* ‘horse’s droppings, lit. horse-lemon’ from pseudo-compounds like *borsó* ‘pea’, *‘wine-salt’ or *közgaz* ‘University of Economics’, *‘public gas’.³¹ However we might wish to twist our words, it is clear that Komi “compound verbs” differ in a number of respects from what we like to call compounds.

3.2. A redundant description: the constructional approach

In what follows, the outlines of a non-formal analysis will be presented.³² All linguistic objects exhibiting formal, semantic, and grammatical properties that do not follow from anything else (another construction) are

²⁹ Bloomfield (1935/1965, 160–1).

³⁰ Or at least a form: “*unique elements*, which occur only in a single combination, are linguistic forms,” *ibid.*, 160. In such a case, the meaning of the element that does not occur on its own is whatever the meaning of the combination differs in from that of the other element used alone. But that meaning can not always be satisfactorily circumscribed.

³¹ Cases like *villamos* ‘tram’, *‘fork-wash’ are simpler since compounds of the structure N+V (cf. *villa* ‘fork’, *mos* ‘wash’) are nonexistent in Hungarian.

³² For more details on constructional grammars, cf. Kálmán (2001).

called 'constructions'. In this sense, constructions include not only various grammatical structures but also each individual lexeme. In addition, constructions can be characterised by other properties like frequency, productivity, stylistic value, etc. Individual constructions can be embedded in one another, they can partially overlap, and indeed whether something belongs to some construction is not necessarily a question of yes or no.

Although an approach like this appears to be a lot less exact than a rule-based description, it is excellently suitable for accounting for cases in which rules fail. If, for instance, a derivational suffix often joins stems of particular properties, we are inclined to posit a rule. That rule, however, often fails to apply to other stems of the same properties. If we discard the rule on that basis, we cannot account for formal and functional/semantic parallels. As opposed to a rule, a construction does not force us to expect that the given parallel works in each and every case, in an unlimited manner. A construction merely tells us that the given parallel does occur. If we think of grammars as descriptions of what the language user knows, constructions are a lot more adequate means of description than rules are: constructions do explain speakers' ability to understand structures that they have not previously encountered (like new derivations or compounds), and also the way linguistic games work, non-productive derivational suffixes turn into productive ones, etc.

In the case of Komi compound verbs, the following constructions are to be reckoned with. First of all, there would be a general construction involving compounds whose posterior constituent is *munni*, *kivni*, *vižni*, *kerni*, *vartni* or *večni*. (The other compounds will be ignored henceforth since the present inquiry is primarily concerned with grammaticalisation.) Within that general framework, the sets of compounds whose anterior constituents are nouns, adjectives, adverbs, or onomatopes all constitute separate constructions. These constructions may involve information about their meaning (e.g., 'get into a particular state', 'become characterised by the given property', 'emit the given type of sound', etc.). Constructions whose meanings are as expected are typical; others will be less typical or atypical. It is actually a matter of free choice whether we posit an individual construction for each hapax-initial compound verb or whether we consider them to be items belonging to the general construction but not belonging to any anterior-constituent-specific construction. Separate constructions would be needed, however, for anterior constituents involving *-šer-*, *-a-* (and possibly *-k-*), as well

as for reduplicative anterior constituents, although the latter issue would probably go far beyond the range of compound verbs.

What are far more interesting for us here are posterior-constituent-specific constructions. There is a separate construction for each individual posterior constituent, containing both its formal properties (e.g., that *kivni* takes anterior constituents with the “thematic” vowel *-a-*, that *kerni* prefers reduplicated anterior constituents, etc.) and its semantic properties (primarily Aktionsart-related ones). Within posterior-constituent-specific constructions, individual typical meanings form separate constructions again. (Given that constructions may overlap, these constructions of typical meanings could unite compounds whose first constituents do refer to the meaning of the compound with other compounds whose first constituents are totally meaningless. An analysis built on morphemes would draw a sharp line between the two cases.)

Necessarily, each individual compound verb would be a construction itself, since their exact meanings would not be deducible from other constructions in general. It is partly a matter of arbitrary choice which compounds (other than Komi compound verbs) should or should not be taken to be independent constructions. This depends on what properties are spelled out in the overall constructions. It is conceivable that each and every compound (in all languages) should be taken to be a separate construction.

The question may arise as to what is the point in such an analysis, if all compounds at hand are taken to be separate constructions. In what way is this better than taking each compound verb to be a separate morpheme? In addition, a drawback of the constructional description is that it is lengthier, since it assumes a number of constructions that have no role whenever a given compound is interpretable without them.

A point in favour of the constructional analysis is that it can explain the way the speaker behaves when he encounters a verb ending in *munni*, *kivni*, *vižni*, *kerni*, *vartni* or *večni* that he has so far been unfamiliar with. He will assume some aspectual property, transitivity or intransitivity, a thematic role for the subject, he will assume some typical meaning, and he will try to reconcile all these with the context; he will be more suspicious of a *kivni*-final form in which the first constituent does not end in *a*, etc. All that is unexplainable if one does not posit the redundant constructions, too. (Of course, a morpheme-based description can also be complemented with some reference to these properties, but that will have no theoretical relevance.) Redundancy, then, is not a weakness

of this description, but rather a characteristic feature of the material described. If the grammar tries to model the speaker’s competence, it has to describe all mobilisable pieces of knowledge, including ones that are not formulable as strict rules.

4. The grammaticalisation of Komi verbs

In terms of the foregoing, it is clear that six Komi verbs³³ *munni*, *kivni*, *vižni*, *kerni*, *vartni*, *večni* have lost their original meanings in a number of constructions (now in the theory-neutral sense) but they have remained clearly recognisable as formal elements. Although they cannot be singled out of most such constructions as grammatical morphemes, the constructions formed with them do exhibit characteristic formal properties and meanings.

If we try to approach this phenomenon with the notion of morpheme, we cannot even speak of grammaticalisation since the original morpheme gets lost in these structures and the whole “compound verb” constitutes a single unanalysable morpheme. In such cases, what we have instead is the lexicalisation of constructions involving the given verbs. It is questionable, however, if a significant number of such constructions did not exist beforehand in a different form (e.g., with a separable first constituent) or in a different meaning. The possibility cannot be excluded that many of these constructions did not arise from earlier (looser) combinations but analogically, following the model of existing other constructions of the sort. This appears to be supported by the high number of hapax (once-only) anterior constituents and by the existence of typical meanings. What all that seems to suggest is that many of these forms have been created by a playful, emotionally coloured word formation process. If this is so, we cannot speak of direct lexicalisation of the verb; rather, what we have is a two-step process: in the first step, a few combinations

³³ According to Raija Bartens (2000, 272), ‘onomatopoetic verbs’ (*deskriptiiviverbit*) already existed in Proto-Permian (*kantapermi*). She presents forms like Udmurt *čupkarini* and Komi *čup kerni*, (dialectal) *čup karini* ‘kiss, lit. do “smack”’ as evidence. The Komi item does not figure in our set of examples since here the onomatopoetic item gets separated from the verb in negation. Such constructions occur with many more verbs. The consolidation of the connection of the verb and the additional element only took place in Komi and only with the six verbs given, hence grammaticalisation—at least its final stage—is an exclusively Komi(-Zyryan?) phenomenon.

with the given verb are lexicalised; and in the second, constructions of the given form start proliferating in an analogical manner. (This is not a case of the posterior constituent turning into a suffix since it should exhibit a lot more striking common properties then.)

With respect to the grammaticalisation process, we cannot ignore the role of verb phrases (i.e., combinations that get split in negation) that involve other adverbs or onomatopes (as well as nouns or adjectives in a similar role) and that are semantically often rather close to the (inseparable) compound verbs. It is unclear whether the merger (into compound verbs) of verb phrases involving *munni*, *kivni*, *vižni*, *kerni*, *vartni*, *večni* took place before or after their proliferation began and why it was exactly these verbs that participated in the process. A thorough investigation of verb phrases that have not turned into compounds could perhaps tell us that there is a continuum, a range of transition between the original meanings of these verbs and their semantically depleted uses in compounds and hence the two kinds of uses are not as much detached from each other as the analysis of just the compounds suggests. In that case, the description presented here would be worth thinking over anew.

References

- Bartens, Raija 2000. Permiläisten kielten rakenne ja kehitys [Structure and development of the Permic languages] (SUST 238). Suomalais-ugrilainen seura, Helsinki.
- Berezki, Gábor 2002. A cseremisiz nyelv történeti alaktana [A historical morphology of Cheremiss]. A Debreceni Egyetem Kossuth Egyetemi Kiadója, Debrecen.
- Beznosikova, L. M. – E. A. Aibabina – R. I. Kosnireva 2000. Коми-роч кывчукör [Komi-Russian dictionary]. Коми небöг ледзанін, Сыктывкар.
- Bloomfield, Leonard 1935/1965. Language. George Allen & Unwin, London.
- Hockett, Charles 1954/1957. Two models of grammatical description. In: Word 10: 210–31. Published again in: Martin Joos (ed.): Readings in linguistics. 386–99. University of Chicago Press, Chicago.
- Kálmán, László 2001. Konstruksiós nyelvtan [Constructional grammar] (Segédkönyvek a nyelvészet tanulmányozásához VIII, Nem transzformációs nyelvtanok III [Supplementary textbooks on linguistics 8, Non-transformational grammars 3]). Tinta Könyvkiadó, Budapest.
- Lakó, György (ed.) 1967–1978. A magyar nyelv finnugor elemei I–III [Finno-Ugric elements in Hungarian 1–3]. Budapest, Akadémiai Kiadó.
- Lytkin, V. I. (ed.) 1961. Коми-роча словарь [Komi-Russian dictionary]. Иностранной да национальной словаряслöй государственной издательство, Москва.

Sidorov, A. (ed.) 1953. Порядок слов в предложении коми языка [Word order in the Komi sentence]. Коми книжное издательство, Сыктывкар.

Address of the author: László Fejes
Research Institute for Linguistics
Hungarian Academy of Sciences
Benczúr utca 33.
H-1068 Budapest
fejes@nytud.hu

GRAMMATICALISATION AND PREVERBS

TAMÁS FORGÁCS

Abstract

The aim of this paper is to investigate the historical process whereby preverbs came into being in Hungarian: to shed light on the reason why certain adverbial elements, used autonomously at first, were subsequently degraded into items of a bound grammatical category. It will be seen that that path is anything but straight: various factors may be involved in adverbial modifiers turning into preverbs, diverse “access roads” may lead to the same main road (this is also part of the reason why a number of items in the present-day stock of Hungarian preverbs are related to several parts of speech, e.g., to adverbs and to postpositions, at the same time). The second part of the paper tries to answer the questions why the stock of preverbs is presented in a heterogeneous manner in certain grammars of Hungarian, what role subjective criteria play in classifications, and how reliable the criterion of productivity is as a general guiding principle.

1. The historical process of the emergence of preverbs

It is common knowledge that widely divergent views can be found in the literature concerning the size of the stock of Hungarian preverbs, i.e., the number of items that can be classified as preverbs in this language (cf. e.g., Jakab 1976, 3–10; Komlósy 1992, 494–8; Kiefer–Ladányi 2000, 480–2). Nevertheless, there seems to be general consensus on the view that preverbs mainly go back to adverbs (several of them are still used as adverbs and/or as postpositions today). As far as the actual manner of their emergence is concerned, however, significant differences are assumed to exist among the various subclasses of preverbs.

Pais (1959, 183–4) distinguishes three basic ways in which preverbs may have emerged, the first two of which, in my view, can be collapsed as in (a) below:

- (a) In the first type, in addition to the adverb that will turn into a preverb, the sentence contains another adverbial constituent in an appositive relation with it; as time goes by, the adverb “changes sides” and goes over to the verb to become its preverb.

- (b) The second type is similar except that the item that “changes sides” is not an independent adverb behaving as a free morpheme but the postposition of a postpositional phrase.
- (c) I think there is also a third way of preverb formation: here, two constituents of an idiomatic construction fuse into a compound that becomes the model for a productive rule of compound formation while its anterior constituent gradually turns into a preverb.

Let us take a closer look at those three types.

1.1. Preverbs from appositive constructions

1.1.1. As was mentioned above, this type may occur in two versions. The first version is described by Pais (1959, 183) as follows:

“A considerable part of what are called independent adverbs or adverbs proper are by no means primarily independent in a ‘historical’ perspective. Items like *alul* ‘underneath’, *felül* ‘on top’, *belül* ‘inside’, *kívül* ‘outside’, *elül* ‘in front’, *háttul* ‘at the back’, *hátra* ‘to the back’, *oldalt* ‘at the side’, *közbül* ‘in between’, *közel* ‘nearby’, etc. did not and still do not have a meaning on their own, isolated from a given situation; it is the circumstances of speaking that lend them some concrete meaning component. Thus we can say that the adverbs at hand only gain some sense if they become related to an overt or covert item like *ház* ‘house’, *kert* ‘garden’, *akol* ‘sheep-fold’, *kút* ‘well’, *barlang* ‘cave’, *fészek* ‘nest’, *terv* ‘plan’, or rather the concepts they stand for. As a consequence, some adverbs may become replacements of an adverbial noun phrase referring to some concrete concept or else the repetition of the latter, subsequently or previously, for the sake of emphasis. For instance: *Kinn a ménes, kinn a pusztán* ‘The herd of horses is outside, out in the wasteland’. Or: *Az udvaron kinn találtak rá* ‘He was found outside, in the yard’.”

In this case, then, the adverb having a vague conceptual content is complemented by an adverbial noun phrase having a concrete meaning; and as time goes by, the preverbal adverb (proto-preverb) loses its independence and becomes an anterior constituent of a compound, or a preverb. The most important reason of its emergence must be the pragmatic pressure mentioned by Langacker (1977) that stems from the speaker’s strive for informativity and expressiveness. Pais (1959) only mentions the two examples cited above, but some early documents of Hungarian contain sentences in which it is actual proto-preverbs that stand before the verbs. Although the intonation of these sentences is unknown, if it is the case that spelling as two words reflects the competence of the language users

of the time, the following cases exemplify the appositive-like use referred to by Pais:

- (1) (a) BécsiK. 5: *le* *ülő* Ruth az *azatoc* *oldalához*
 down sit-past Ruth the harvester-pl side-3sg-allative
 'Ruth sat down at the side of the harvesters'
- (b) MargL. 11: *le* *fekszik* *vala* ... *egy* *gekenre*
 down lie-past-3sg a mat-sublative
 'he lay down onto a mat'
- (c) ÉrdyK. 509: *fel* *ül* *lőve* *hathara*
 up sit-past-3sg horse-3sg back-3sg-sublative
 'he mounted [sat up on the back of] his horse'
- (d) JordK. 146: *be* *kelnek* *Emathba*
 in go-3pl Hamath-illative
 'they go into Hamath'
- (e) ÉrdyK. 46: *ki* *es* *kelhet* *belőle*
 out and rise-can it-relative
 'he can also rise from it'
- (f) CornK. 65v–66r: *ala* *folnak* *vevgyekre*
 down flow-3pl valley-pl-sublative
 'they flow down into the valleys'
- (g) DomK. 16: *Meg* *teere* *az* *fraterekhez*
 back turn-past-3sg the brother-pl-allative
 'he went back to the brethren'

Mátai (1992, 687) points out with respect to such examples that the preverb-verb complex occurs with a different kind of adverbial:

"for instance, with verbs referring to position, non-changing or permanent state (in a neutral, non-emphatic sentence) the adverbial typically answers the question 'where': JókK. 66: *ewlne az aştalnal* : *sederet in mensa* ['would sit at the table'], whereas with directional preverbs, an adverbial answering the question 'where to' is required: BécsiK. 5: *le ülo Ruth az azatoc oldalához* — *sedit* ... *ad messorum latus* ['sat down to the harvesters' side'] [...] If, however, the sentence contains an emphatic constituent, the preverb-less verb can also have a 'where to' argument: [...] *asztalhoz yleenek* 'they sat [down] to the table'; the explanation being that the emphatic adverbial perfectivises the verb or makes it express a movement just like the preverb does. ..."

It is true that the preverb is capable of changing the argument structure of a verb in present-day Hungarian, too: yet in these examples something else is involved, in my view. The verb *ül* 'sit' has two argument structures to begin with: *ül vhol* 'sit at some place' and *ül vhová* 'sit to

some place' (cf. ÉrtSz. 7: 102–3). The latter is exemplified by *A kutya a küszöbre ült* 'The dog sat down on the doorstep' or *Fecskék ültek a telefondrótra* 'Swallows sat down onto the telephone wire'. As can be seen, it is not emphasis that triggers the use of a directional argument since both sentences are neutral. That is, what the example from BécsiK. above shows is rather that it was an adverb of vague conceptual content (*le* 'down') that preceded the verb (why it got there will be discussed below) and its interpretation was given by a concrete adverbial phrase (*az aratók oldalához* 'to the harvesters' side'). Later on, that adverb of relatively empty semantics lost its independence altogether and joined the verb.

It is of course true that a former adverb now unambiguously functioning as a preverb may often require the occurrence of certain argument types in the sentence. In the case of *leül* 'sit down somewhere', the adverbial is not a compulsory argument but rather an optional adjunct (*Pista le|ült (a pamlagra)* 'Steve sat down (on the sofa)'); but in that of *leül* 'serve a sentence', having a transitive argument frame instead of the original intransitive one, the verb requires an obligatory object argument (*Pista le|ült három évet* 'Steve served a sentence of three years').¹ Preverbs of a more concrete meaning may in fact require that their adverbial arguments occur overtly (e.g., *Pista bele|esik az árokba* 'Steve falls into the ditch').

It appears then that such complements required by the preverb may originate from exactly the specifying role referred to. The reason why the appositive-like adverbial may be omitted from beside *leül* is the phenomenon observed with a number of preverbs that — perhaps as a token of linguistic economy — they may absorb the meaning of the complement that used to be there in an appositive role, e.g., *Le|ül (egy székre/a földre)* 'He sits down (on a chair/on the ground)', *Fel|teszi a kalapját (a fejére)* 'He puts his hat on (his head)', *Le|száll (a vonatról/a buszról)* 'He gets off (the train/the bus)'.

1.1.2. The other type is actually the inverse of the first. Pais (1959, 184) claims that another factor that may have played a role in the emergence of preverbs were

¹ In the case of a preverb-less version of the latter, a locative complement or a temporal object is still required, cf. *Pista Tökölön ül* 'Steve is sitting [serving his sentence] in Tököl' vs. *Pista három évet ül (rablásért)* 'Steve is serving [a sentence of] three years (for robbery)'.

“adverbs that followed, for purposes of emphasis, an adverbially used noun phrase in a coordinate relationship. This is the type we can think of: *A szobában benn | találta | Palit* ‘In the room inside | found | Paul = He found Paul in the room’. *Az ebek a juhokat | az akolba be | hajtották* ‘The dogs the sheep | into the fold in | drove = The dogs drove the sheep into the fold’. *Az árpát | a szárán rajt | hagyta* ‘The barley | on its stalk on | left = He left the barley on its stalk’. *A lóra rá | tette | a nyerget* ‘On the horse on | put | the saddle = He put the saddle on the horse’. PeerK. 129: *Maria földre lee eseek* that can be divided as *Mária | a földre le | esék* ‘Mary | onto the ground down | fell = Mary fell down onto the ground’.—In sentences of the above type, the items *benn*, *be*, *rajt*, *rá*, *le* etc. used in parallel with the adverbially used noun phrases subsequently got closer to, or merged into, the meaning of the verb.”

The explanation of such constructions, then, is seen by Pais in that an adverbially used noun phrase can be complemented by a reinforcing adverb:

“Assume the following to be a typical construction in old times: *Az erdőből ki jön* ‘He comes out of the forest’. What was *ki* ‘out’ more closely related to, in other words, what did it form a construction with: the adverbial *az erdőből* ‘from the forest’ or the verb *jön* ‘comes’? I think, the semantic link must have originally obtained with *az erdőből*, because this was the only way in which a relatively realistic concept could be attributed to it: an instance of *ki* ‘out’ without such a link makes no sense. *Az erdőből ki* ‘out of the forest’ could be attached to the verb taken together as a construction referring to a relation. Later, due to motivations arising in certain psychological or objective situations, *ki* could get separated from that construction and associated with the concept of change referred to by the verb” (Pais 1959, 184)

As we can see, in both types, there is an “appositive-like” relationship between the adverb of vague conceptual content and the concrete adverbial noun phrase. The difference between the two versions is that, in the first, an adverb of vague conceptual content is subsequently specified by a concrete adverbial, whereas in the second, the concrete adverbial comes first and is complemented by a semantically more general adverb that follows it. In the second case, then, we have to do with a seemingly superfluous, redundant item; but such general adverbs may appear to be partly superfluous even when they precede the adverbial noun phrase. Why are they used at all, then? The answer is not easy to give. The main role must have been played by the pragmatic needs alluded to above: a more exact specification of information, the enhancement of the direction of movement. In addition, factors having to do with the “dynamism” of sentence structure may also have played a role—factors like the ones

pointed out by Deme (1959, 192) with respect to the preverb-like use of the adverb *ott* 'there'.

Given that the effect of semantic and pragmatic factors in the emergence of preverbs is relatively easy to see, whereas the last-mentioned aspect of an item "turning into a preverb" has not been involved in related discussions to a sufficient extent so far, I will concentrate on that aspect in what follows.

In his paper, Deme investigates non-emphatic sentences and tries to find out why speakers prefer sentences that include *ott* along with an adverbial noun phrase to corresponding sentences lacking *ott* (with certain verbs, and with a level stress pattern). His initial example is the following:

- (2) (a) A ház előtt egy bérkocsi vesztegelt.
 the house in.front a hackney-cab be-stranded-past-3sg
 'In front of the house, a hackney-cab was stranded.'
- (b) A ház előtt vesztegelt egy bérkocsi.
 the house in.front be-stranded-past-3sg a hackney-cab
 'A hackney-cab was stranded in front of the house.'
- (c) A ház előtt ott vesztegelt egy bérkocsi.
 the house in.front there be-stranded-past-3sg a hackney-cab
 'In front of the house, there was a hackney-cab stranded.'

Deme claims that whereas (2a–b) are very difficult to pronounce without *bérkocsi* and *a ház előtt*, respectively, carrying sentence stress (given that, with main stress on the verb, the rendering is rather artificial), in the version involving *ott*, that enterprise is successful. Deme then investigates the issue thoroughly on the basis of a corpus and comes to the conclusion that this solution is especially frequent with the verb *van* 'be', as well as with verbs referring to position (e.g., *ül* 'sit', *áll* 'stand', *fekszik* 'lie'), verbs referring to being somewhere (e.g., *lakik* 'dwell', *táborozik* 'camp', *él* 'live', *telel* 'spend the winter'), verbs referring to undirected movement (e.g., *megy* 'walk', *lépdel* 'tread', *ugrál* 'caper', *táncol* 'dance'), and intransitive verbs referring to a state-like process (e.g., *ragyog* 'shine', *villog* 'glitter', *tátong* 'gape'). It is also frequently found with verbs denying some form of movement — this time, not only with intransitive but also

with transitive ones (e.g., *marad* 'stay', *reked* 'get stuck', *pusztul* 'perish', and *hagy* 'leave', *felejt* 'forget (somewhere)', *tart* 'keep', respectively).²

Deme goes on to claim the following (1959, 192):

"The item *ott* 'there' in most of the sentences listed is used in a preverb-like manner in order for the predicate to be able to stand in a straight word order and carry some degree of stress, without some other constituent receiving main stress that would otherwise unavoidably follow from the stresslessness of the verb. — But that preverb-like use of *ott* characterises the sentence rather than the verb: *ott* is not there for semantic reasons but for reasons having to do with the dynamism of sentence structure; hence, the complex *ott* + verb is not a lexical construction but a syntactic one both in terms of its origin and in its character."

This conclusion is quite acceptable in my view and is presented by Deme as supported by two main arguments. First, he points out that the occurrence of the adverb *ott* is not necessary in cases where there is some other way to make the verb carry stress. This can be done, for instance, with the help of the stressless modifier *csak* 'only' whose appearance renders that of the preverb-like *ott* superfluous in terms of "sentence dynamism":

- (3) Péter *csak* állt szótlantul, s egy pillantást sem vetett
 Peter only stand-past-3sg speechless and one glance-acc nor cast-past-3sg
 Marira.
 Mary-sublative
 'Peter was just standing speechless, without even casting a glance at Mary.'

His second argument, and the one that is more important with respect to the emergence of preverbs in general, runs as follows: It is not unprecedented even for proper preverb-verb complexes "that their preverb only occurs when the verb is stressed, that is, the sentence is non-emphatic; otherwise, when the predicate is not stressed, they stand without the preverb rather than in the inverse order verb-preverb" (Deme 1959, 192). Consider some examples:

- (4) (a) (i) Betegsége teljesen étvágytalanná tette,
 illness-3sg totally appetite-less-translative make-past-3sg
 de három nap után végre megpróbált enni.
 but three day after finally prev-try-past-3sg eat-inf

² In the last two groups, lexicalisation has already started. For instance, *otthagyt* 'leave there, forget to take along' is spelt solid, suggesting that the item is lexicalised as a preverb+verb complex.

- (ii) Betegsége teljesen étvágytalanná tette,
 illness-3sg totally appetite-less-translative make-past-3sg
 de három nap után végre *enni* próbált.
 but three day after finally eat-inf try-past-3sg
 'Due to his illness, he totally lost his appetite, but after three days he at last tried to eat something.'
- (b) (i) Kirohant az utcára, s elkezdett ordítani.
 out-rush-past-3sg the street-subl and prev-begin-past-3sg shout-inf
 (ii) Kirohant az utcára, s ordítani kezdett.
 out-rush-past-3sg the street-subl and shout-inf begin-past-3sg
 'He rushed out to the street and started to shout.'
- (c) (i) A parasztok végül megindultak a kastély felé.
 the peasant-pl finally prev-start-past-3sg the castle toward
 (ii) A parasztok végül a kastély felé indultak.
 the peasant-pl finally the castle toward start-past-3sg
 'The peasants finally made for the castle.'

I think that Deme's insight with respect to the occurrence of *ott* in certain sentences may bear upon the emergence of preverbs, too. It is known that in sentences of neutral interpretation and **flat prosody** (Deme's **non-emphatic** sentences), each major constituent carries a roughly equal degree of stress: none of the constituents is more prominent than the others. In non-neutral sentences, however, one of the constituents is assigned sentence stress (this can be either the verb or the constituent immediately preceding it): but this entails that the stress on that constituent "eradicates" stresses on anything that follows (sentences with **eradicating prosody**). These rules apply to most verbs, except for two groups of verbs: **stress avoiding** and **stress requiring** ones (cf. Komlósy 1992, 339).

Considering the semantic groups of stress avoiding verbs in Komlósy (1992, 341), we find that they more or less coincide with the verbs that in Deme's empirical study turned out to require the occurrence of *ott* in non-emphatic sentences (*van* 'be', *marad* 'stay', *húzódik* 'range', *található* 'be found'; *hagy* 'leave', *felejt* 'forget', *tart* 'keep', *talál* 'find', etc.). This coincidence is to be expected in view of the fact that stressing a stress-avoiding verb results in an ungrammatical sentence:

- (5) (a) *Az 'újságosbódé' található a 'következő sarkon.
 the newsstand find-able the next corner-superessive
 'The newsstand can be found at the next corner.'
 (b) *Az 'újságosbódé' "található a következő sarkon.
 the newsstand find-able the next corner-superessive
 'The newsstand *can* be found at the next corner.'

One possibility of avoiding stressing the verb is to make the adverbial noun phrase precede the verb:

- (5) (c) Az 'újságosbódé a 'következő sarkon található.
 the newsstand the next corner-supressive find-able
 'The newsstand can be found at the next corner.'

If, however, we do not wish to end the sentence with the verb but want to avoid its being stressed, we have to insert a local adverb to precede it whose stress will make it possible for the verb to lose its stress:

- (5) (d) Az 'újságosbódé 'ott /'itt található a 'következő sarkon.
 the newsstand there/here find-able the next corner-supressive
 'The newsstand can be found there/here, at the next corner.'
- (e) A 'pénztárcámat 'ott /'lent felejtettem az 'újságosnál.³
 the wallet-1sg-acc there/down forget-past-1sg the newsagent-adessive
 'I left my wallet there/down there with the newsagent.'

What follows from all this? I think what follows is that the emergence of some of the preverbs may partly be due, along with the pragmatic and semantic considerations referred to above, to the prosodic factor that Deme observed with respect to the use of the adverb *ott*. In the case of stress avoiding verbs, stress on the verb results in an ungrammatical sentence, hence unless the verb is at the end of the sentence (or rather, in a position immediately following a stressed argument or adjunct), an adverbial item of the *ott* type is required in order to keep the grammaticality of the sentence.⁴ The group of stress avoiding verbs, however, constitutes a relatively small and atypical group, therefore — as an anonymous reviewer

³ The inserted adverb can obviously not only be *ott* 'there': with a directional argument, *oda* 'there to, to that place' can be used, e.g., **A 'könyv 'került 'Péterhez*, vs. *A 'könyv "Péterhez került* 'The book got to PETER', but: *A 'könyv 'oda került 'Péterhez* 'The book got to Peter'.

⁴ On the other hand, neutral word order always results in verb stress in the case of stress requiring verbs (except if they are preceded by a manner adverbial in which case the latter will bear stress in most cases). All other constituents preceding an unstressed verb are to be interpreted as focus (cf. Komlósy 1992, 342): *'János '(nagyon) szeret 'olvasni* 'John likes to read (very much)'; *János "olvasni szeret* 'It is to read that John likes'. Komlósy (1992, 341–3) claims that it is mostly verbs expressing emotional attitude or possibility/ability (e.g., *szeret* 'like', *kedvel* 'be fond of', *utál* 'detest', *gyűlöl* 'hate'; *gátol* 'hamper', *akadályoz* 'hinder', *szabad* 'be allowed', *lehet* 'be possible') that belong here. From our point of view here, it is interesting that these verbs tend not to have versions with preverbs: apart from a couple of exceptions, all that can be added to them is the preverb *meg-*, and

has also pointed out to me—it does not provide us with a broad enough basis of explanation to account for a historical process as widespread and resulting in such a large group of verbs as the emergence of preverbs. On the other hand, a preverbal adverb may be “useful” in the case of verbs of a less marked stress behaviour, too, in order for the sentence to be of a really neutral stress pattern. Consider the following examples:

- (6) (a) 'Péter 'megy az 'utcán.
Peter go-3sg the street-superessive
'Peter is walking in the street.'
- (b) 'Péter 'ott megy az 'utcán.
Peter there go-3sg the street-superessive
'Peter is walking there in the street.'
- (7) (a) 'Péter 'jön az 'erdőből.
Peter come-3sg the forest-elative
'Peter is coming from the forest.'
- (b) "Péter jön az erdőből.
Peter come-3sg the forest-elative
'It is Peter who is coming from the forest.'
- (c) 'Péter az "erdőből jön.
Peter the forest-elative come-3sg
'It is from the forest that Peter is coming.'
- (d) 'Péter 'ki jön az 'erdőből.
Peter out come-3sg the forest-elative
'Peter is coming out of the forest.'
- (e) 'Péter az 'erdőből 'ki 'jön.
Peter the forest-elative out come-3sg
'Peter is coming out of the forest.'
- (8) (a) 'Péter 'megy az 'erdőbe.
Peter go-3sg the forest-illative
'Peter is going to the forest.'
- (b) "Péter megy az erdőbe.
Peter go-3sg the forest-illative
'It is Peter who is going to the forest.'
- (c) 'Péter az "erdőbe megy.
Peter the forest-illative go-3sg
'It is to the forest that Peter is going.'
- (d) 'Péter 'be megy az 'erdőbe.
Peter in go-3sg the forest-illative
'Peter is going into the forest.'

probably even that can only be attached to them since the time its perfectivising function has developed, and only in an analogical manner.

- (e) 'Péter az 'erdőbe 'be megy.
 Peter the forest-illative in go-3sg
 'Peter is going into the forest.'

Sentences (6a) and (6b) are not really different, even though the use of *ott* makes it more unambiguous that the sentence is of flat prosody. In (6a), it takes special care not to emphasise the subject since even the slightest extra emphasis will indicate that it is in focus position: "Péter 'megy az 'utcán. ≈ "Péter megy az utcán 'It is Peter who is going in the street'. This sentence expresses a locative relation; most preverbs, however, go back to lative (directional) adverbs. But if we consider (7a) and (8a), expressing an elative and an illative relation, respectively, we see that they are also somewhat difficult to pronounce with a neutral stress pattern. The focussed versions (7b–c) and (8b–c) are a lot more acceptable. Therefore, if we want a neutrally stressed sentence, we can make use of the solution seen before: the insertion of a conceptually empty adverb before the verb. It is true that sentences (7d–e) and (8d–e) are somewhat unusual to our present-day native intuition with the adverb pronounced separately (thus: 'Péter "be megy az "erdőbe 'Peter goes in, to the forest', as opposed to 'Péter 'bemegy az 'erdőbe 'Péter goes into the forest'), it is nevertheless more than conceivable that the data from early documents (of which there are quite a few) showing spellings with the adverb and the verb in two words are reflexes of that earlier situation. These items are of course not real arguments of the verbs that follow them; they could be more appropriately characterised as free adjuncts. Given, however, that a verbal modifier and an immediately following verb count as one word for stress purposes (i.e., the stress is deleted after a verbal modifier, cf. É. Kiss 1998, 37), the adverb gradually fuses with the verb as time goes by, and becomes the anterior constituent of a compound, or a preverb proper.

The occurrence of "appositive-like" adverbs that can be taken to be predecessors of preverbs, then, must have been primarily due to communicative and pragmatic reasons (e.g., a strive for accuracy and expressivity) but an additional factor that may have facilitated their emergence is the prosodic role that Deme observed in connection with the preverb-like use of *ott* 'there'. The adverbial constituents of general conceptual content occurring in the above examples make it possible for the verb

to lose its stress and for sentences with an unambiguously neutral stress pattern to be produced.⁵

1.2. Preverbs from postpositions

The two types we have looked at so far are likely to have provided us with the earliest way of the emergence of preverbs. It appears that it is the oldest and most frequently used Hungarian preverbs that came into being in that way, the meanings of which may of course have subsequently changed considerably, as in their uses to express perfectivity or verbal aspect. There are, however, other preverbs, too, whose way of emergence differs from what we saw above. Some preverbs also occur as postpositions; the reason being that in certain postpositional phrases the postposition may change sides and go over to the verb. Pais (1959, 184) discusses that type, too: "It appears furthermore that in a large number of cases the adverb did not enter into relation with the verb on its own but rather as a postposition attached to a noun."

It is well known that postpositions expressing a pure relational meaning used to be independent nouns and their forms involving a (primary) case marker

"followed a noun in a possessive construction, and the phrase thus formed served as an adverbial complement of the predicate. Thus: *ék(et) | fa + bel-é | üt* 'wedge(-acc) | tree + inside-poss | hit = drive a wedge into (to the interior of) a tree'; *hegy + al-á | megy* 'hill + underside-poss | go = go under (to the foot of) a hill'; *lovát | ház + mög-é | vezeti* 'horse-poss-acc | house + back-poss | drive = drive one's horse behind (to the back of) the house'. [...] Second constituents of such case-marked possessive constructions, that is, postpositions, mainly turned into inflexions. [...] Other directions of development, however, were also taken. In particular, a postposition — whether or not it turned into an inflexional suffix in the meantime — may have drifted apart from the preceding noun rather than getting even closer to it such that it swung over to the verb. Thus, some postpositions turned into both a case marker and a preverb, while others just turned into a preverb." (Pais 1959, 184)

Kiefer-Ladányi (2000, 482) list the following preverbs as going back to postpositions: *alá* 'to underneath', *elé* 'to before', *fölé* 'to above', *mellé*

⁵ Perhaps this is why stress requiring verbs include those combined with *meg-* only: if a verb is stress requiring to begin with, i.e., it "wants to" bear main stress itself, no proto-preverb going back to a real adverb may stand before it to take stress away from it.

‘to beside’, *mögé* ‘to behind’, *utána* ‘to after’, as well as *át* ‘through’, *keresztül* ‘across’, *túl* ‘over’. They do not motivate the division they make within this group of items — perhaps it is meant in terms of their diverse syntactic behaviour (the second group contains postpositions that cooccur with case-marked nouns). In my view, however, that distinction between the two groups of postpositions is paralleled by a distinction between the groups in their behaviour as preverbs, and can be traced back to the two different ways in which they came into being.

1.2.1. The six items listed as the first group belong to a large group of postpositions that form a **possessive construction** with their head noun and are simultaneously connected to the predicate of the sentence (Sebestyén 1965, 190 refers to them as “double bondage” postpositions). Most of such items turned into postpositions by grammaticalisation, and some of them lost some more of their independence and ended up as case markers. The latter are not involved in the process described here. The six items listed above, however, did not always get coupled with their head nouns but “defected” to the verbs dominating them. That defection had some morphosyntactic consequences: as opposed to the uninflected noun plus postposition complexes that the preverb-less verbs govern, the preverb-verb combinations govern an obligatory dative argument:

- (9) (a) (i) Péter az ágy alá bújik.
Peter the bed under hide-3sg
(ii) Péter alá|bújik az ágynak.
Peter under|hide-3sg the bed-dative
‘Peter hides under the bed.’
- (b) (i) Károly a kép mögé néz.
Charles the picture behind look-3sg
(ii) Károly mögé|néz a képnek.
Charles behind|look-3sg the picture-dative
‘Charles looks behind the picture.’

That difference is less surprising if we think of the fact that in constructions like *az ágy alá* ‘under the bed’, *a kép mögé* ‘behind the picture’ the postposition originally had a possessive relationship to the noun before it. This can sometimes be explicitly marked, as in the classic line from Arany’s *Toldi*: *Jól tudom, mi lappang bokrodnak megette* ‘I know what is hidden behind your bush [behind of your bush]’. Another well-known linguistic fact is that the dative and the genitive are historically related. That made it possible for the marker of the possessive to develop from

the dative inflection; but there are further pieces of evidence for that relationship, too. Think of Hungarian “dative possessive” constructions (*A királynak volt egy csodaszép leánya* ‘The king had a beautiful daughter’) or constructions in other languages where possession is expressed by the dative (e.g., French *ce livre est à moi* ‘that book is mine [to me]’; Russian *ему пять лет* ‘he is five years old [to him five years]’). We may also mention Hungarian constructions in which a dative noun is followed by another noun inflected with a 3sg possessive marker that could be the possessed entity belonging to the former, cf. e.g., JókK. 161–2: *az naualjyas anyjanak meg adak holt gyermeket* : *miseræ matri mortuum filium reddiderunt* ‘The miserable mother was given back her dead son’.

Taking all that into consideration, the change of argument structure referred to above is not unexpected. Whereas the preverbs discussed in section 1.1 used to be independent adverbs that were made more precise by the concrete adverbial noun phrase of the sentence (*ki megy a házból* ‘out go the house-relative = go out of the house’), in the present type there is just one adverbial complement. But that single adverbial is expressed by a postpositional phrase in which the (proto-)postposition is not an independent item. If that item “defects” to the verb, the nominal part of the postpositional phrase remains on its own. That fact — assuming unmarked possessive constructions — might result in a disturbing instance of homonymy since there would be nothing to indicate which constituent is the subject, and which is the adverbial, cf. (10b):

- (10) (a) A kutya alá bújik a macska.
 the dog under hide-3sg the cat
 ‘The cat hides under the dog.’
 (b) *A kutya alá|bújik a macska.
 the dog under|hide-3sg the cat
 ‘The dog hides under the cat /The cat hides under the dog.’

However, that case does not occur since the verb in its preverb-adorned version retains its directionality and since the postposition originally containing the direction marking has now become an anterior constituent of the verb (being its predicate) the adverbial relation is marked on the nominal part of the postpositional phrase. The fact that it is the dative marker that is used for that purpose is not that surprising for two reasons: first, the *-nak/-nek* of the dative itself evolved from the directional inflection *-nak/-nek* ‘to’, and second, the dative is closely related to the genitive.

1.2.2. The other three preverbs listed above (*át*, *keresztül*, *túl*), on the other hand, exhibit a different behaviour: these do not require a dative suffix but retain the suffix that they also govern as postpositions:

- (11) (a) (i) Az asztalon át nyúl a könyvért.
the table-superessive across reach-3sg the book-causalis
(ii) Át|nyúl az asztalon a könyvért.
across|reach-3sg the table-superessive the book-causalis
'He reaches across the table for the book.'
- (b) (i) A folyó a városon keresztül folyik.
the river the town-superessive through flow-3sg
(ii) A folyó keresztül|folyik a városon.
the river through|flow-3sg the town-superessive
'The river flows through the town.'
- (c) (i) A jegenyefa a tetőn túl nyúlik.
the poplar the roof-superessive beyond reach-3sg
(ii) A jegenyefa túl|nyúlik a tetőn.
the poplar beyond|reach-3sg the roof-superessive
'The poplar reaches beyond the roof.'⁶

The reason for that difference, in my view, is that these postpositions do not go back to possessive constructions but to adverbial constructions of an appositive character. That is also the explanation of their requiring a case ending on the noun they cooccur with: they specify, make precise, or explain the meaning of the case-marked noun preceding them (cf. Sebestyén 1965, 198). In fact, then, we have double adverbials again, just like in the cases in section 1.1. The difference primarily lies in the fact that in those cases the appositive-like relationship obtained between

⁶ Along with semantic development, changes in argument structure may obviously occur. For instance, *keresztül* 'across' can be used in a concrete meaning, as a postposition, with the verb *lép* 'step': *A küszöbön keresztül lép a szobába* 'He steps into the room across the threshold'. However, when used as a preverb, the occurrence of *keresztül* excludes that of the other concrete complement (*a szobába*): *Keresztüllép a küszöbön* 'He steps across the threshold [superess.]'. This is probably related to the fact that the adverbial argument of the preverb-verb complex can alternate with an accusative argument: *Keresztüllépi a küszöböt* 'He steps over the threshold [acc.]'. And if the remaining complement is of an abstract meaning, the other adverbial would be absolutely out of place: *Keresztüllép a problémán* 'He gets over the problem [superess.]'. In addition, substitution by an accusative argument is all but impossible (or at least highly unusual) in this case: *?Keresztüllépi a problémát* 'He gets over the problem [acc.]'.

elements that were capable of being located in non-adjacent positions of the sentence, whereas here the adverb stands right after the suffixed noun. In these constructions, then, it was easy for the (proto-)postposition to defect to the verb, given that it was rather loosely connected to the noun in the first place. But since the remaining noun was inflected itself, the change of argument structure observed in the previous section was not needed, either: the preverb-verb complex could simply retain the original case frame of the postposition.

1.3. Preverbs from idiom chunks

There is yet another way for preverbs to emerge, although one that is more recent and less frequent than the previous ones: emergence from parts of idioms. Of the present stock of Hungarian preverbs, *agyon-* 'over, to death' and *tönkre-* 'over, to ruins' definitely belong here; some pieces of the literature (including ÉrtSz.) classify a number of other similar elements as preverbs, too (e.g., *cserben* 'in the lurch', *észre* 'to one's senses', *kölcsön* 'as a loan', *létre* 'to existence', *síkra* 'to the field', *újja* 're-, into a good shape', *végbe* 'into effect', *véghez* 'to the end'). These latter elements are not productive at all, hence most of the relevant literature does not classify them as preverbs; but *agyon-* and *tönkre-* are relatively productive, therefore they are usually taken to be preverbs.⁷

Agyon- and *tönkre-* are among the most recent preverbs of Hungarian. Klemm (1928, 258) points out that *agyon* was a plain adverbial in the 16th century, and *agyon|üt* 'strike dead' simply meant 'knock on the head', e.g., 1575: *bottal úteotte volt agion*, *kýbe meg súketúlt* 'he knocked him on the head with a stick, that made him deaf'.⁸ Thus, *agyon* first only occurred with *üt* 'hit', *ver* 'beat', developing into a set phrase after some time. Given that hitting someone on the head often led to death, it was as early as in the second half of the 16th century that the perfectivising meaning '(hit, strike, beat) heavily' → 'to death' began to arise. But at the same time, its original meaning started to be overshadowed. It is in the late 17th century that *agyon* began to spread to other verbs in this new sense, e.g., *agyon lőtte* 'shot him dead'

⁷ The reason, I think, is that the semantics of these makes them eminently capable of fulfilling one of the most important tasks of preverbs: to express perfectivity.

⁸ The original meaning of *agy* was 'skull' or 'head'; its present meaning 'brain' is a later development (cf. TESz. 1, 106).

(1691), *agyonrúg* 'kick dead' (1770), *agyon tsiklándom* 'I will tickle her to death', *agyonitta magát* 'he drank himself dead' (1792). The perfectivising 'to death' meaning evolved in the 19th century into a more peculiar shade of perfectivity, emphasising the frequency, too many repetitions, higher degree than desirable of the given action, e.g., *agyonbeszél* 'talk too much about', *agyonsír* 'cry too much over', *agyondicsér* 'praise to the skies', *agyoncsókol* 'smother with kisses', *agyonhajszol* 'overwork', *agyonfázik* 'be chilled to the bone', *agyonhallgat* 'kill by silence', *agyon táncolja magát* 'dance oneself to extreme fatigue', *agyonissza magát* 'drink oneself to death/drink heavily', *agyonázik* 'get drenched through'.⁹

Tönkre- is an even more recent development. It is questionable if it is in fact a preverb at all. Kiefer and Ladányi (2000, 482) classify it as a preverb on the basis of its productive patterns of combination, whereas Jakab (1976, 99; 1982, 66) does not. TESz. (III, 967) does not call it a preverb but speaks of *tönkre*-initial compounds that

"were created with a syntactic contraction of the noun *tönk* 'stump' in the sublative with verbs expressing action, movement, or directedness. The adverb *tönkre* getting consolidated as a compound constituent and the metaphorical uses that the individual compounds assumed can be explained in various ways. It is possible that the development started in the vocabulary of shipping. It may have been based on the fact that ships sometimes got stranded on a tree stump in the water and the damage thus made in them caused them to sink, to be destroyed. The problem with this explanation is that the earliest occurrences in connection with shipping that we have data about are relatively recent; cf. 1897: *ha tönkre viszi a hajót, lecsapják a tisztességéből* 'if he sails the ship over a stump, he will be dismissed from his position' (István Tömörkény) [...]. It is also possible, however, that *tönk* in *tönkre-* originally referred to the wood-cutting block on which, in villages, discarded pieces of furniture were also split up."¹⁰

Let us for the moment set aside the question of whether *tönkre-* is a preverb or rather the anterior constituent of a few lexicalised compound verbs. Let us concentrate on the issue why, in the case of a number of such anterior members (like *cserben*, *észre*, etc., see above), it is suggested by some that they should be seen as belonging to the stock of Hungarian preverbs. The source of uncertainty may be that these items of the vocabulary were idiomatic units (phrasemes) to begin with, but due to

⁹ In popular usage, sometimes: *agyonra* [sublative], e.g., *agyonra sózták a húst* 'the meat was terribly oversalted'.

¹⁰ Another possibility that cannot be excluded is that e.g., a cart could also get damaged by running over a stump.

their frequent cooccurrence they fused to such an extent that their unitary character is now indicated in spelling, too (e.g., *cserben|hagy* 'leave in the lurch', *tönkre|megy* 'be ruined/destroyed', *helyben|hagy* 'approve of/beat up', etc.). This is not much of a problem in itself since we could simply say that these are not set phrases any more but lexicalised complex verbs that — similarly to other compounds that arose in sentences rather than analogically — came into being by losing the (potential) pause between their component parts due to having occurred together quite a lot.¹¹ However, anterior compound constituents going back to idiom chunks behave syntactically in much the same way as preverbs do: for instance, in focussed sentences or in negation they get split from their verbal element, thus they retain their independence to some extent:

- (12) (a) Péter JÁNOST hagyta cserben, nem Károlyt.
 Peter John-acc leave-past-3sg lurch-inessive not Charles-acc
 'It was John who Peter left in the lurch, not Charles.'
 (b) Nem Péter ment tönkre, hanem János.
 not Peter go-past-3sg stump-sublative but John
 'It was not Peter who went bankrupt but John.'

A number of items still functioning as idiom chunks behave in the same way:

- (13) Férfjhez KATI ment, nem Eszter.
 husband-allative Kate go-past-3sg not Esther
 'It was Kate who got married, not Esther.'

The fact that there is hardly any difference in syntactic behaviour between (i) compound-constituent-like forms that are still idiom chunks like *férfjhez* (*ad*) 'marry off' (*férj* 'husband', *ad* 'give'), *sorba (áll)* 'queue up' (*sor* 'queue', *áll* 'stand'), *lépre (megy/csal)* 'be taken in/take in' (*lép* 'bird-lime', *megy* 'go', *csal* 'lure'), (ii) preverb-like former idiom chunks

¹¹ In the phraseological literature, Somhegyi (1988; 1992) suggested that the terms 'monophraseme' and 'pseudo-monophraseme' should be introduced. Examples of the former, in his view, would be items like *felszarvaz* 'make a cuckold of' (← *szarvakat rak vki fejére* 'id., lit.: put horns on someone's head') or *kikosaraz* 'reject (a suitor)' (← *kosarat ad vkinek* 'id., lit.: give someone a basket'). Items like *cserbenhagy*, *tönkre megy* would be assigned to the class of pseudo-monophrasemes since they are actually made up of two elements, it is just the spelling that suggests their unity, just like in the case of *baklövés* 'blunder, lit.: shooting a buck', *köppönyegforgató* 'turncoat', *szőrszálhasogatás* 'hair-splitting' (whereas *bakot lő* 'commit a blunder', *köppönyeget fordít/forgat* 'turn one's coat', *szőrszálat hasogat* 'split hairs' are straightforward phrasemes/set phrases).

like *cserben-* 'in the lurch', *helyben-* 'in place', *véghez-* 'to the end', and (iii) preverbs proper like *be-* 'in', *ki-* 'out', *meg-* [perfectiviser] can be explained by a property that their functions share: all of them occur in sentences as **verbal modifiers**. What is common in their syntactic behaviour is that they occupy a position within the VP that is different from that of complements: whereas the latter follow the verb, verbal modifiers precede it in the neutral pattern. As has been mentioned, the modifier and the verb that follows it count as a single word in terms of stressing, a factor that favours their fusion.

The question is what motivates the claim that certain preverbal elements are preverbs, whereas others are just anterior constituents of lexicalised compound verbs. Spelling can of course not be a reliable point of departure given that, as the examples so far suggest, it is mainly a matter of taste and intuition on the part of dictionary makers whether a modifier that is part of an idiom retains its relative independence or is degraded into the anterior constituent of a compound. Whether or not an item is a preverb depends on the way that word class is defined and on the results of certain syntactic tests. In that connection, the semantic non-transparency of the relationship between the components is often referred to; but an even more important criterion is that of productivity, or the number of verbs that can be formed with the given item (cf. Soltész 1959, 15–6; Kiefer–Ladányi 2000, 480–2). These two do not of course correlate in all cases. For instance, *haza-* 'home' combines with a large number of verbs but, since these combinations usually do not mean anything else but the mere sum of their parts, Soltész (1959, 15) does not regard this item as a preverb. On the other hand, although *cserben-* has an idiomatic meaning in *cserbenhagy* 'leave in the lurch', in terms of productivity it still remains an idiom chunk, or rather the anterior constituent of a lexicalised compound verb, since it only occurs in this single combination.¹² The items *agyon-* and *tönkre-*, likewise going back to idiom chunks, however, are clearly classified as preverbs by Kiefer–Ladányi (2000, 501–13) on the grounds that they are highly productive.¹³

¹² The expression *cserben marad* 'be left in the lurch' used to occur as an idiom (see Szarvas–Simonyi 1890, 412 [NySz]) but it did not evolve into a compound verb.

¹³ It is worth briefly mentioning here that a somewhat similar process has occurred in German in expressions of the type *vonstatten gehen*, *zuwege bringen*, *zugrunde gehen*, etc. Up to the 19th century, these constructions were taken to involve prepositional phrases and spelt as *zu Grunde gehen*, *zu Wege bringen*, *von Statten gehen*, etc., as it is still done today in many other cases like *zu Hause bleiben*.

Let us see in somewhat more detail the degree to which productivity is a reliable criterion of being a preverb.

2. The size of the stock of preverbs in terms of productive rules of formation

As we saw above, most grammars list *agyon-* as one of the preverbs of Hungarian. Yet, the Hungarian Dictionary of Definitions (ÉrtSz. I, 52–5) contains only 22 verbs with *agyon-* as a preverb. These are the following:

- (14) *agyonbeszél* ‘talk too much about’, *agyoncsap* ‘strike dead’, *agyoncsévelt* ‘hackneyed’, *agyoncsigáz* ‘overexcite’, *agyondicser* ‘praise to the skies’, *agyondolgoztat* ‘overwork’, *agyondolgozza magát* ‘overwork oneself’, *agyonházol* ‘run sy over’, *agyonhajszol* ‘overfatigue’, *agyonhallgat* ‘kill by silence’, *agyonkínozt* ‘torment to death’, *agyonlő* ‘shoot dead’, *agyonnyom* ‘crush to death’, *agyonrúg* ‘kick to death’, *agyonűjt* ‘strike dead’, *agyonszorít* ‘crush to death’, *agyonszúr* ‘stab to death’, *agyontapos* ‘trample to death’, *agyonüt* ‘strike dead’, *agyonvág* ‘strike dead’, *agyonver* ‘beat to death’, *agyonzúz* ‘smash to death’

Although twenty-two verbs in the dictionary cannot be said to constitute a small group, we can be suspicious of the actual productivity of *agyon-*. Therefore, I have surveyed the loadedness of *agyon-* by the help of a present-day corpus having an electronic search facility. Having gone through the material of a CD containing all issues of the newspaper *Ma-*

in Betracht ziehen, außer Landes gehen, etc. Later, however, the constituents of some former prepositional phrases got adverbialised and joined their head verbs in terms of stress. As Fleischer (1997, 93) points out, the process of merger of such prepositional phrases was facilitated by their semantic development (gradually more abstract uses, the loss of certain semantic components of the noun) and their increasingly frequent occurrence. (An additional factor was that most of such expressions involved the preposition *zu*: this brought some type-forming regularity into the change.) However, during the 1998 spelling reform, these phrases were meant to be revitalised in the sense that the adverb-like forms can be spelt separately, along with the earlier form. Thus, whereas earlier one had to write *instand halten/setzen/bringen, zugrunde gehen, zuleide tun, zumute sein/werden, zunutze machen, zustande bringen/kommen, zutage bringen/fördern/kommen*, etc., today the following forms are also seen as correct: *in Stand halten, zu Grunde gehen, zu Leid(e) tun, zu Mute sein, zu Nutze machen*, etc. On the other hand, the latter option is not open for cases like *abhanden kommen, vonstatten gehen, zu-nichte machen, zupass kommen, zustatten kommen, zuteil werden*. Such changes in the rules of spelling, in my view, are only good for increasing the embarrassment of language users; they are quite unable to stop the historical process of grammaticalisation.

gyar Hírlap published between 1994 and 2001, I found that the preverb *agyon-* is in fact rather productive: the search yielded a total of 1948 occurrences representing 208 different verb forms (including participles; in some of these cases, the corresponding finite verb would not be possible or would be highly unusual with *agyon-*). These verbs (and participles) are the following (the glosses in (15) are given with the preverbal *agyon-* ignored):

- (15) *agyon*|adózta 'tax', -affektál 'simper', -ajnároz 'fondle', -asszimilál 'assimilate', -átkozott 'cursed', -ázik 'get drenched', -babusgat 'pamper', -bagóz(ott) 'smoke(d)', -beszél 'talk', -bírá 'criticise', -bombáz 'bomb', -bonyolít 'complicate', -bürokratizál 'bureaucratise', -cenzúráz 'censor', -cicomáz 'adorn', -cigaretta(ott) 'smoke(d)', -cikizett 'coddled', -cirkalmaz 'do in a roundabout way', -citált 'cited', -civilizált 'civilised', -cizellált 'chiselled', -csap 'strike', -csépel 'thresh', -csepült 'abused', -csigázott 'stimulated', -csikarva 'twisting', -csiszolt 'polished', -csócsált 'champed', -csomagol 'pack', -dédelget 'caress', -dekorál 'decorate', -dicsér 'praise', -dicsőít 'glorify', -díszít 'decorate', -dízájolt 'designed', -dobál 'throw about', -dolgoztat 'make work', -doppingol 'dope', -dorongol 'cudgel', -dresszúráz 'drill', -éget 'burn', -ékszerezett 'jewelled', -elektronizált 'electronised', -elemez 'analyse', -ellenőriz 'control', -emészt 'digest', -erősít 'strengthen', -értelmez 'interpret', -eszi (magát) 'eat (oneself)', -etet 'feed', -fagy 'freeze', -fárad 'get tired', -fáraszt 'tire', -favorizál 'favour', -fegyelmez 'discipline', -fél 'be anxious about', -fetisizál 'make a fetish of', -firkál 'scribble', -foglalkoztat 'employ', -foltoz 'patch', -fotóz 'photograph', -főz 'cook', -frusztrált 'frustrated', -fűszerez 'spice', -gépesített 'mechanised', -gyilkol 'murder', -gyötör 'torture', -hajszol 'pursue', -hajt 'drive', -hallgat 'be silent', -halmoz 'heap', -hangsúlyoz 'emphasise', -hangszerel 'score', -használ 'use', -hierarchizált 'hierarchised', -hirdetett 'advertised', -hordott 'worn', -honzannázott 'praised', -hűt 'refrigerate', -húz 'pull', -ideologizált 'ideologised', -idéz 'quote', -igekötözött 'preverbed', -ingerelt 'irritated', -interjúvol 'interview', -írt 'written', -ismert 'known', -ismételt 'repeated', -istápol 'support', -ivott 'drunk', -ízest(ett) 'flavour(ed)', -izzadt 'sweated', -játszik 'play', -karcol 'scratch', -kárhóztatott 'blamed', -karikírozott 'caricatured', -kínozt 'torment', -kommunikál 'communicate', -komplikál 'complicate', -konstruál 'construct', -kopíroz 'copy', -kopott 'worn', -koptat 'wear out', -kozmetikált 'pipe-clayed', -kritizált 'criticised', -lapít 'flatten', -látványosított 'spectacularised', -lelkiz 'schmooze', -lő 'shoot', -lyuggat 'perforate', -machinál 'machinate', -magasztal 'praise', -magyaráz 'explain', -manipulál 'manipulate', -másol(t) 'copied', -mázol(t) 'paint(ed)', -mediatizált 'mediatised', -menedzsel 'managed', -mérgezett 'poisoned', -misztifikált 'mysticised', -montírozott 'mounted', -mosott 'washed', -motorizált 'motorised', -mozog 'move', -műtrágyáz 'fertilised', -nevet 'laugh', -nyaggat 'vex', -nyom 'crash', -nyugtat 'sedate', -nyúzt 'exploit', -olvas 'read', -pallérozt 'civilised', -passzíroz 'sieve', -permetez 'spray', -plasztikázott 'face-lifted', -platformosított 'platformed', -politizál(t) 'politicise(d)', -pszichologizált 'psychologised', -púder(ett) 'powder(ed)', -püföl 'thrash', -rágalmaz 'slander', -ragasztott 'pasted', -rágott 'chewed', -reformál(t) 'reformed', -reklámoz(ott) 'advertise(d)', -restaurált 'restored', -rongyolt 'ragged', -rugdal 'keep kicking', -rugdos 'keep kicking', -rúg 'kick', -sanyargat 'scourge', -sarcol 'hold to ransom', -sikált 'scrubbed', -simogat

'stroke', -skandált 'scanned', -smukkozott 'jewelled', -sóz 'salt', -stilizált 'stylised', -strapált 'worn down', -sújt 'strike', -süt 'bake', -szabályoz 'regulate', -szabdal 'slash', -szankcionál 'sanction', -szárad(t) 'dry (dried)', -szennyez(ett) 'pollute(d)', -szerepeltet(ett) 'cause(d) to figure', -szeret 'love', -szeretget 'caress', -szervez(ett) 'organise(d)', -szoláriumozott 'tanned', -szponzorál(t) 'sponsor(ed)', -sztárol(t) 'promote(d)', -szubvencionál(t) 'subsidise(d)', -szúr 'stab', -szurkál 'prickle', -takargat(ott) 'conceal(ed)', -taktikáz 'manoeuvre', -támogat(ott) 'support(ed)', -táplál(t) 'feed (fed)', -technicizált 'technicalised', -terhel 'load', -tetovál(t) 'tattoo(ed)', -tipor 'trample', -titkol(t) 'hide (hidden)', -töm 'stuff', -töpreng 'brood', -trükköz 'trick', -turbózott 'turboed', -tűzdel(t) 'interlard(ed)', -un 'be bored of', -utál(t) 'detest(ed)', -ünnepel 'celebrate', -üt 'strike', -vág 'strike', -vallat 'interrogate', -véd(ett) 'defend(ed)', -vegyszerezett 'chemicalised', -ver 'beat', -versenyeztet 'make compete', -világított 'lit', -vitat 'discuss', -zenél 'make music', -zsézett 'greased', -zsúfol 'crum'

The examples show the productivity of the pattern (with the shared meaning component 'very much, too much'): the preverb can be applied to some quite recent or even nonce-derived verbs/participles like *agyonmediatizál* 'over-mediatise', *agyonszoláriumozott* 'extremely tanned', *agyontechnicizált* 'over-technicalised', *agyonsmukkozott* 'laden with jewels', etc. On the other hand, it can be seen that the preverb is far from applicable to finite verb forms in all the cases: it is at least as frequently used with past participles. It would of course be possible to back-form a verbal version from these but in many cases it would sound strained. For instance, *agyonigekötözött* 'stuffed with preverbs' sounds fine as a participial modifier but would perhaps be less acceptable if used as a verb:

- (16) Káromkodásai mívesen cizelláltak, szóróvidítései komoly filozófiai távlatokat összegeznek, a politikai beszédekből bőségesen merített horrorisztikus képzavarai és dagályos félrebeszélései, a túlragozott, *agyonigekötözött*, toldaléktól burjánzó szavak és a féktelenre rontott mondatszerkezetek a kor teljes, enciklopédikus összefoglalását adják ki.
(*Magyar Hírlap*, 5 October 2000, 13)

'His swear-expressions are finely chiselled, his clippings span sincere philosophical perspectives, his horrid mixed metaphors and bombastic ravings taken profusely from political speeches, his over-inflected words *stuffed with preverbs* and rampant with suffixes, and his wildly corrupted sentence structures make out a full encyclopaedic epitome of the period.'

Given that the same search program has access to a text corpus of the issues of *Vasárnapi Újság* from 1854–1860, for curiosity's sake I examined the loadedness of *agyon* in that corpus, too. The results superbly illustrate the process of linguistic change: the number of occurrences found is only 194 (roughly 10% of the occurrences in *Magyar Hírlap* that reflect the late-20th-century situation). Those 194 tokens are distributed over

23 different verbs, a number seemingly corresponding to the number of entries in ÉrtSz.; however, on closer scrutiny it turns out that the two sets of verbs are not the same. Of the 22 verbs in the dictionary, 12 occur in *Vasárnapi Újság*, too, and the other 11 of the corpus are not included in the dictionary. The overlap obviously concerns the possibly most frequent *agyon*-forms (e.g., *agyoncsap* 'strike dead', *agyonlő* 'shoot dead', *agyonüt* 'strike dead', *agyonver* 'beat to death'), and it is likely that the verbs included in the dictionary but missing from the corpus (e.g., *agyonricsé* 'praise to the skies', *agyonhajszol* 'overwork', *agyonrúg* 'kick to death') were also in existence already in the mid-nineteenth century. On the other hand, the older corpus also contains neologisms that show a productive pattern of the secondary meaning of the preverb: *agyonczinczog* 'scrape the violin endlessly'.

- (17) A zenejárvány, különösen a zongoratyphus s az énekkolera, melynek áldozatai sajátképp azok, kik megkíméltettek általa, jellemző oldala Bécsnek s nem ritkán találni vargaműhelyt, hol a mustával az atya „Herr von” Breselmayer például üti a taktust leányasszonyának rabvallató trilláihoz s örjítő futamaihoz, ide nem számítva a dél felől a zenedéből hazakerült Szepi urfit, ki észlázító hegedűdühön-géseivel *agyonczinczogja* az embert.

(Letters to the Editor, *Vasárnapi Újság*, 18 December 1859, 18)

'The musical epidemic, especially the piano typhus and the singing cholera, whose victims are strangely those who are immune to it, is a characteristic trait of Vienna and you often find shoemaker's shops in which the father, say Herr von Breselmayer, beats the time with his last to his daughter's cross-examining warbles and maddening roulades, not to mention master Seppl coming home from the music school around noon who *scrapes you to death* with his breath-taking frenzies on the violin.'

It is conspicuous, on the other hand, that — although in 153 of the 194 occurrences *agyon* is in immediately preverbal position — it is spelt as a separate word in 51 cases. Some of these latter are of the type *agyon üt* 'strike', *agyon lő* 'shoot', *agyon ver* 'beat' but it is unlikely that *agyon* in these should be interpreted as 'on the head, on the skull'. The more so since the same verbs also occur in the way they are used today, i.e., spelt solid. In addition, *agyon* is found written separately in a number of cases where it is to be taken metaphorically and clearly requires the interpretation 'very much, too much', as in *agyon kacagja magát* 'laugh oneself to death', *agyon éhezi magát* 'starve oneself to death', *agyon táncolja magát* 'dance oneself to death', *agyon unja magát* 'kill oneself by boredom'. The last one of these occurs spelt solid, too: *agyonuntam*

már magam a nagyvárosban 'I was bored to death in the city' (*Vasárnapi Újság*, 24 July 1859).

All this shows grammaticalisation in progress: functionally, the idiom chunk is a verbal modifier just like a normal preverb is but its degree of independence is higher. The state of the language as shown by *Vasárnapi Újság* reflects the fact that *agyon* has done roughly two-thirds of the way towards becoming a preverb.¹⁴

Let us now examine the productivity of the anterior constituent *tönkre* 'to ruins'. In *ÉrtSz.* (6, 773–4), we find a mere six of such forms:

¹⁴ It is interesting to note that Hungarian also has an adverb *halálra* 'mortally, to death' that is used partly in the same sense as *agyon* is and that occurs fairly often, too: *halálra gázol* 'run over', *gyötör* 'torment', *kínoz* 'torture', *sebez* 'wound', *sült* 'strike' (all: 'and kill'), etc. Some people take it to be a loan translation of German *zu Tode*. But Grétsy–Kovalovszky (1980–1985, I 124) [NyKk.] is of the opinion that that view is incorrect since such expressions may have developed within Hungarian, too, and adds that the exaggerating adverbs *halálban* 'in death', *halálra* 'to death' were already attested centuries ago. Thus, there can be no objection to the metaphorical use of *halálra neveti magát* 'laugh oneself to death', *halálra ijed* 'get frightened to death', *halálra/holtra válik* 'be petrified, look like death'. Originally, then, *halálra válik* must have meant 'die (soon)'. Consequently, *halálra ver* counts as an idiom in which *halálra* is a verbal modifier. The same can be said of *félholtra ver* 'beat half-dead', *kékre-zöldre ver* 'beat blue and green', *véresre ver* 'beat sy until he bleeds', in the same way as the adverbial component of *agyon|ver* 'beat dead' used to be an idiom chunk. But *halálra* preserves more of its original meaning, its motivatedness, hence it has less chance to be grammaticalised than *agyon* whose root underwent a semantic change 'head' → 'brain' and whose original meaning was thus overshadowed to some extent. It is of course mainly in expressions at least partly preserving the original interpretation 'on the head' → 'to death' that *agyon* can be replaced by *halálra*: in expressions with the secondary meaning 'too much', this is difficult to accept: **halálra igekötőzött* 'preverbed to death', **halálra szoláriumozott* 'tanned to death'. On the other hand, there are forms that show a 'very' interpretation: *halálra röhögi magát* 'laugh a lot' (also, as a slang expression: *hullára röhögi magát* (lit.: 'laugh oneself into a corpse')), *halálra keresi magát* 'earn a tremendous sum of money', *halálra unja magát* 'be bored stiff', etc. In the *Magyar Hírlap* database, I have found an example in which *halálra* is beginning to assume the metaphorical meaning 'too much' of *agyon*:

Clinton a múltkoriban keserűen panaszkodott, hogy a republikánusok megállítják, lelassítják, megölik vagy egyszerűen csak *halálra beszélik* a törvényhozásban a reformjait. ... (*Magyar Hírlap*, 7 November 1994, 7)

'Clinton bitterly complained the other day that Republicans stop, slow down, kill his reforms, or simply *talk them to death* in the legislative assembly.'

- (18) *tönkre*jut 'fail'/'go broke', *tönkre*megy 'get spoiled'/'go broke', *tönkre*silányít 'mar', *tönkre*tesz 'spoil, bring to ruin', *tönkre*ver 'defeat totally', *tönkre*zúz 'shatter'

As can be seen, it is no wonder so many commentators wish to exclude *tönkre-* from among preverbs, calling it a mere compound constituent. If we take into consideration the facts that *tönkre|jut* is practically obsolete and *tönkre|silányít* is stylistically labelled as 'informal' in the dictionary, we are left with four verbs only, making the productivity of the pattern dubitable. But as we have seen in connection with *agyon-*, the dictionary and everyday usage may show considerable divergence (the recent revised edition of ÉKSz., Pusztai 2003, only contains 27 entries in *agyon-*). Therefore, I have gleaned all occurrences of *tönkre-* from the *Magyar Hírlap* corpus, with the following results. In the issues from 1994–2001 of that newspaper, one and a half times as many occurrences (2955) can be found as with *agyon-*, but whereas the two thousand or so tokens of the latter are distributed over 208 types (verbs and participles), the item *tönkre-* occurred in only 18 different verbs. These are as follows:

- (19) *tönkre|ázik* 'get drenched', -bombáz 'bomb', -cenzúráz 'censor', -fut 'run', -gyakorol 'exercise', -lapoz 'thumb (a book)', -lő 'shoot', -megy 'go', -nyom 'crush', -nyúz 'exploit', -privatizál 'privatise', -silányít 'mar', -simogat 'stroke', -tesz 'make', -tol 'push', -vág 'cut', -ver 'beat', -zúz 'shatter'

The loadedness of two of these stands out strikingly: *tönkre*tesz 'spoil' and its derivatives occur 1184 times, and *tönkre*megy 'get spoiled/go broke' and its derivatives occur 1089 times, whereas the remaining 692 tokens are distributed over 16 types. Of the latter, some are really recent:

- (20) Lady Menuhin nem mindennapi egyéniségének jelentős szerepe volt abban, hogy nem hullott szét a férje világa, amikor kiderült: a mester hosszú pályafutása alatt *tönkregyakorolta* az ujjait, és ezek már nem mindig engedelmeskednek a koncertek során.
(*Magyar Hírlap*, 20 April 1996, 14)

'Lady Menuhin's remarkable personality played an important role in preventing her husband's world from falling to pieces when it turned out that the Maestro, during his long career, had *ruined his fingers in practising* so that they did not always obey him during his concerts.'

- (21) Az etióp Főnök — társai csak így, azaz Neftengának szólítják — egyszerűen *tönkrefutotta* a hajrában az ugyancsak csúcsra áhítózó kenyai Daniel Koment.
(*Magyar Hírlap*, 15 August 1997, 19)

'The Ethiopian Boss—his team-mates only call him that, i.e., Neftenga—in the finish simply *sprinted to rout* the Kenyan Daniel Komen who had also aspired to break the record.'

- (22) ...sok család vásárol az ünnep előtt tapsifülest — meggondolatlanul és feleslegesen. Napok alatt megunják az állatot, s még az a jobbik eset, ha elviszik az állatkertbe. Itt nyomban kiderül, hogy szó szerint *tönkresimogatták*, dédelgették, nyomorgatták az állatokat. (Magyar Hírlap, 14 April 2001, 20)¹⁵

'Many families buy bunnies before Easter — heedlessly and needlessly. They lose interest in the little animals in a few days, and it is the better of the two possibilities if they take them to the Zoo. It usually turns out there that the animals were literally *caressed*, fondled, fingered *to the brink of ruin*.'

- (23) A gyorsan feledésbe merült beatkorszak atmoszférája, darabos lendülete annyira eleven a kötetben, hogy az olvasó riadtan keresi az azóta eltűnt bisztrókat, zenei élményeket, a szabad szombat összehasonlíthatatlan izgalmát — a kor egész jól működő, már *tönkreprivatizált* „infrastruktúráját”.

(Magyar Hírlap, 12 August 1995, 5)

'The atmosphere of the fast forgotten Beat Age, its rough vigour comes through so lively in the book that the alarmed reader will start looking for the snack bars and musical experiences that have disappeared since, the incomparable excitement of Saturdays off — the whole “infrastructure” of the period that worked rather smoothly but that has already been *privatised to ruins*.'

As regards the loadedness of *tönkre* in *Vasárnapi Újság*, the emerging picture is interesting there, too: only *tönkrejut* 'fail'/'go broke', *tönkrejuttat* 'ruin', *tönkretesz* 'spoil, ruin', and *tönkrever* 'defeat totally' occur spelt solid, but *tönkre jut* is spelt as two words 18 times and only 9 times as a single word, *tönkre ver* occurs in 37 cases whereas *tönkrever* only once, and 37 instances of *tönkre tesz* occur as against 5 tokens of *tönkretesz*. Other forms that occur as phrases are *tönkre megy* 'be damaged', *tönkre silányít* 'mar', *tönkre silányul* 'be marred', and *tönkre rongál* 'destroy' (all four occurring once). In sum: not only was *tönkre* a lot less frequent at that time than *agyon*, but it also appears to have been more independent, semantically more motivated: it was written as a separate word in a preverbal position relatively more often than *agyon*. That is: *tönkre* was simply an idiom chunk at the time, very much at the beginning of its way to becoming a preverb. But the fact that the process had started

¹⁵ Cf. *agyonsimogat* 'caress to death' that can be taken literally or metaphorically, as opposed to *tönkresimogat* that may not imply actual killing by caressing.

is nevertheless shown by its relative productivity: as opposed to other idiom chunks whose distribution is rather limited (like *férjhez (megy/ad)* 'get married/marry off', lit.: '(go/give) to husband', *fejet (hajt)* 'resign oneself to sg', lit.: '(bow the) head'), *tönkre* occurred in 8 combinations, and indeed some prototypical meaning 'to a useless, valueless condition' began to take shape, while the same is not true of the examples just given.

All in all, we can say that—even if they are far from those of *agyon*—the patterns of combination involving the preverb *tönkre* can be seen as productive. It seems to be well-founded, then, that Kiefer and Ladányi classify this item as a preverb, in contradiction to the earlier literature.

On the other hand, some open questions remain. First, if productivity is a major criterion for them, why do we not find the preverb *haza*- 'home' in their list? It is true that Soltész (1959) also says that, even though this item is productive, it cannot be one of the preverbs because of its straight semantics (see above). In addition, Kiefer and Ladányi base their list primarily on that of Temesi (1961), and since the latter does not discuss *haza*- among the preverbs, they do not, either. But Szemere (1965), ÉrtSz., and Jakab (1976) do treat this item as a preverb, therefore Kiefer-Ladányi (2000) should at least consider the issue. The more so since ÉrtSz. itself contains 38 items involving *haza*:

- (24) *haza*|ad 'give', -beszél 'speak', -bocsát 'let go', -enged 'id.', -ereszt 'id.', -ér 'arrive', -gondol 'think', -hív 'invite', -hoz 'bring', -húz 'pull', -jár 'keep going', -járó 'often going', -jön 'come', -jövet 'on one's way', -jut 'get', -kéredzik 'ask permission to go', -kéredzkedik 'id.', -kísér 'escort', -kívánczik 'wish to go', -küld 'send', -megy 'go', -néz 'look', -rendel 'order to come', -szalad 'run', -száll 'fly', -szállít 'transport', -szivárogo 'ooze', -szólít 'call', -szökik 'escape', -takarodik 'take oneself off', -talál 'find one's way', -telepít 'resettle', -tér 'return', -utazik 'travel', -vágvik 'long to go', -vár 'expect', -vergődik 'go with difficulty', -vet 'throw', -vezet 'lead', -viz 'take'

Searching the *Magyar Hírlap* material again, we find 91 more verbs involving the preverb *haza*-. These will not be listed here but it is quite clear that the paradigm of this item is also productive, especially with certain prototypical verbal heads of the 'go', 'transport', 'call', 'send', and 'speak' type. Let us just take the last type as an example: *haza|üzen* 'send a message home', *haza|telefonál* 'phone home' are attested, but *haza|emilezik* 'email home' or *haza|esemesezik* 'send an SMS home' are just as acceptable. In the sense 'take some vehicle home', too, various names of means of transport can be productively used. Attested forms include *haza|autókázik* 'take a car home/drive home' and *haza|taxizik*

'take a cab home', but equally possible forms are *haza|villamosozik* 'take a tram home', *haza|trolizik* 'take a trolley bus home', *haza|tujázik* 'take (the outside of) a tram home', or even *haza|rollerozik* 'scooter home' or *haza|inlineskatezik* 'use an in-line skate to get home'.

Consider a specific instance that excellently proves the productivity of the pattern (the general meaning could be roughly paraphrased as 'refer to one's own people in a given manner'):

- (25) Nem kell a duma a gazdasági alapokról, a gazdálkodásról, a fejlődésről, tulajdonról. Nem is erről van szó, ugye. Hanem hogy a beste zsidajai elveszik a Fradit. Mellékesen sportügy ez, merthogy a nemzeti jelképet nyúlják le. Egyenes beszéd, végre. A múlt hét végén még volt némi bizonytalankodás, kommentároknak tanakodtak, vajon hogyan szurkolnak majd a Fradinak a B-közép ifjai. Most már azonban feltehetik a kérdést egyenesen is, minden fakszni nélkül: ezentúl hogyan lehet zsidózni majd? Holott szerintem zavartalanul. Úgy, mint rég. Legfeljebb kissé önkritikusan. Időnként *hazazsidóznak* majd.

(*Magyar Hírlap*, 26 July 2001, 7)

'Cut the crap about financial bases, economy, development, property. That's not the point. But that those beastly Jews take our sports club away. This is only incidentally a matter of sport: it is a national symbol that they dip. Straight words, at last. At the end of last week there still was some uncertainty, commentaries were pondering over how, from now on, the youngsters of the hard core would support their team. But now, the question can be asked straight away, with no fuss: how can they abuse Jews from now on? Well, in perfect tranquillity. Just like before. At most, a bit more self-critically. Sometimes they will *do a little self-abuse of Jews* ["Jew home"].'

Forms like *haza|komcsizik* 'bolshie home', *haza|cigányoz* 'Gipsy home', *haza|nácizik* 'Nazi home' could be composed in the same way.¹⁶

Another problem with Kiefer and Ladányi's classification is that, among the items they discarded, *felül-* 'over-' does appear productive in light of our corpus search, and even the preverbs *helyre-* 're-', *közbe-*

¹⁶ In addition to the pieces of literature referred to above, NyKk. (Grétsy – Koválovsky 1980–1985, I, 981) also lists *haza-* among the more recent preverbs of Hungarian. Given that the loss of morphological transparency has a major role in an item becoming a preverb, that development in the case of *haza-* may have been facilitated by its becoming an adverb relatively early on. Components of the latter change included phonological factors (the shortening of final *-á*, making the inflectional relation opaque), as well as the analogical levelling within the paradigm of *ház* 'house'. These changes had isolated *haza* from its own paradigm relatively early and blurred the etymological connections it used to have.

'inter-', and *tova-* 'forth' may be characterised as relatively productive.¹⁷ Let us take a closer look at these, too.

The item *felül-* is excluded from among preverbs not only by Kiefer-Ladányi (2000), but also by Jakab (1976, 99). He writes about the type into which he classifies *felül-* that

"the forms including them could be regarded as compounds, some of them involving semantic change, others based on simple fusion. Although their anterior constituents occur in several forms each, they have not reached the level of becoming a preverb. These compounds, then, are similar to items with an adverbial anterior constituent like *jólesik (neki)* 'please (sy)', *jóllakik* 'eat one's fill'; *jóváhagy* 'approve (of)', *jóváír* 'credit (to)', *jóvátesz* 'set right'; *nyilvántart* 'keep on file', etc."

But is this really the case with *felül-*, too? ÉrtSz. reckons with it as a preverb, but it contains altogether ten verbs that involve it (plus a few deverbial forms like *felüljáró* 'overpass', *felülnézet* 'bird's eye view', etc.):

- (26) *felül|bélyegez* 'overprint', -*bírál* 'supervise, counter-check', -*emelkedik* 'rise above', -*halad* 'surpass', -*ír* 'overwrite', -*kerekedik* 'gain the upper hand', -*múl* 'surpass', -*üt* 'overtrump', -*véleményez* 're-survey', -*vizsgál* 're-examine'

I think a certain prototypical meaning ('transcending a former state of affairs') can be observed in these. Pusztai (2003) also treats this item as a preverb, even though labelling it "rare"; his data roughly coincide with those in ÉrtSz. However, in the *Magyar Hírlap* corpus, I have found 30 more of them: some of these involve participles, and two involve deverbial nouns (*felülajánlás* 'overbid', *felülvélemény* 'reevaluation'), most of them, however, are finite verb forms and carry the same prototypical meaning as those in ÉrtSz., e.g., *felül|áraz* 'overmark the price of', -*becsül* 'overestimate', -*fertőződik* 'be infected (in addition to an earlier infection)', -*licitál* 'outbid', -*teljesít* 'overfulfil'. Wherever *felül-* joins a

¹⁷ The cases of *ellen-* 'against' and *külön-* 'apart' are slightly different in that they are not really productive with verbs but they are clearly so with nouns, and not only with deverbial ones at that. These forms appear to be mostly loan translations in the case of *ellen-*, e.g., *ellenszenv* 'antipathy' (← Latin *antipathia*), *ellentengernagy* 'rear admiral' (← German *Konteradmiral*). The forms with *külön-*, on the other hand, are mostly recent analogical forms like *különadó* 'surtax', -*akció* 'separate action', -*játszma* 'separate game', -*jövedelem* 'extra income', -*kereset* 'extra earnings', -*vagyron* 'separate property', -*zárka* 'solitary cell', etc. This type has its own productivity but since these anterior constituents may not exclusively precede deverbial items, I would take this to be a productive pattern of compounding rather than instances of productive preverbs.

perfect participle, the static version of the above prototypical meaning 'over(ly), in a degree transcending a former state of affairs' is witnessed: *felül|dimenzionált* 'over-dimensioned', *-képzett* 'over-trained', *-világított* 'over-lit', *-kormányzott* 'over-governed', *-garantált* 'over-guaranteed'. In a smaller number of instances, the original, concrete meaning of the preverb ('above') can also be found; this meaning is not given in Pusztai (2003) even though it is on the spread in specialised texts, e.g., *felültöltős (mosógép)* '(washing machine) to be loaded from the top', *felülvezérelt* 'steered from above', *felülszelepelte (motor)* '(engine) with valve on top'. What is more, we could not say these are all loan translations. Although *felültöltős* follows the English model (*top loader*) quite faithfully, with combustion engines this is not the case: the English equivalents are *overhead camshaft* (OHC) or *double overhead camshaft* (DOHC). Nevertheless, given that this meaning is instantiated by a mere three items, and even these have a locative (non-directional) meaning,¹⁸ they can be treated as compounds involving adverbs. As concerns the more productive meaning 'transcending a former state of affairs', however, this is more directional in flavour (e.g., *felülmúl* 'surpass' = *fölébe kerekedik* 'gain advantage over', lit.: 'get above, get into a higher position'). Thus, the relatively high number of data must make us consider whether we can really discard *felül-* from among preverbs (especially if the numerically less productive *tönkre-* is given preverb status).

The case of *közbe-* is also worth reconsidering. Its status is similar to that of *felül-*, in that ÉrtSz. contains 14 verbs with it, and Pusztai (2003) also attaches the tag "rare" to it. The ÉrtSz. data are the following:

- (27) *közbe|beszél* 'keep interrupting', *-esik* 'intervene', *-ékelődik* 'become interpolated', *-iktat* 'insert', *-játsszik* 'interfere', *-jön* 'occur (e.g., an unforeseen obstacle)', *-kiált* 'interrupt (shouting)', *-lép* 'intercede', *-szól* 'interrupt', *-szúr* 'insert', *-told* 'intercalate', *-vág* 'interrupt', *-vegyül* 'intermingle', *-vet* 'interpose'

In addition, 14 more of these have been found in the *Magyar Hírlap* database:

- (28) *közbe|avatkozik* 'interfere', *-dumál* 'keep interrupting', *-kérdez* 'interrupt with a question', *-kiabál* 'interrupt (shouting)', *-kotyog* 'chime in (with silly remarks)', *-kurjant* 'interrupt (shouting)', *-mormol* 'mumble (while sy is talking)', *-ordít* 'interrupt (shouting)', *-pöccintget* 'keep prodding in', *-rivalg(ás)* 'interrupt(ion)'

¹⁸ Jakab (1982, 64) says that directional meaning is a characteristic feature of preverbs as a part of speech.

(by cheering)', -robban 'barge in', -tapsol 'clap into (a performance or speech)', -üt(és) 'join(ing) in with a blow', -zár 'flank'¹⁹

Of these, we have to isolate *közbezár*, in which the meaning of the adverbial element differs from 'interrupting some process' that the others seem to share prototypically, and can be paraphrased roughly as 'demarcate with lines (on both sides)'. Since no other data can be found with this meaning, I think this pattern is not productive and *közbezár* can be seen as an adverb-initial compound. For the rest of the examples, however, the meaning 'interrupt some action or process by doing something (especially by some verbal utterance or by creating some sound effect)' can be seen as prototypical. Consider the following two examples from *Magyar Hírlap*, as well as a list of potential forms that have not been attested but would clearly be possible according to the productive pattern:

- (29) Szalay mindvégig szép és pontos riposztokkal, egyenes vonalú, energikus akciókkal szerezte találatait, míg Moresse ravaszul *közbepecsintgetett* Gyöngyi karjára, csuklójára.
(*Magyar Hírlap*, 20 July 1995, 19)

'Szalay scored her hits with fine and accurate ripostes, with straight and energetic actions, whereas Moresse *kept prodding in* cunningly, hitting Gyöngyi's arm or wrist.'

- (30) A képernyőmon megjelenik egy Polanski nevezetű válasza Oklahomából: Szia, te honnan jöttél? Valaki *közbekotyog* Ausztráliából, kész örület, de John Londonból rendreutasítja. Ezt a lapot tényleg az olvasók írják.
(*Magyar Hírlap*, 16 August 1995, 8)

'On my screen, a reply appears from one Polanski from Oklahoma, Hi, where you from? Someone *chimes in* from Australia, sheer lunacy, but John from London pulls him up. This paper is really being written by the readers.'

Similarly, forms like *közbe|rizsázik*, *-vakerol*, *-pofázik*, *-ugat*, *-spícsel*, *-gügyög*, *szövegel*, *-kotnyeleskedik* (all: 'interrupt in some manner', most of them slang), or *közbe|dúdol* 'hum', *-trillázik* 'warble', *-nyávog* 'mew', *-csivitel* 'chirp', *-füttyül* 'whistle', *-gajdol* 'sing rudely', *-óbéogat* 'yammer', or even *közbe|vivátoz* 'cheer into', *közbe|komcsizik* 'bolshie into', *közbe|zsidózik* 'Jew into' (somebody's speech), etc. would be conceivable.

As far as the status of *helyre-* is concerned, 12 forms with it can be found in ÉrtSz. (Pusztai 2003 also labels it as "rare"):

¹⁹ Of these, *közbeavatkozik* 'interfere' is also listed in Pusztai (2003).

- (31) helyre|áll 'be restored', -állít 'restore', -hoz 'remedy', -igazít 'rectify', -jön 'recover', -megy 'go to one's place', -pófoz 'patch up', -pótól 'make up for', -tesz 'replace, put back', -ugrik 'jump into position', -üt 'patch up, save the situation', -zökken 'jump back into place, get into shape again'

All of these have a directional sense, and can be grouped around two meanings: (a) to its original/former place (concrete): *helyre|megy*, *-tesz*, etc.; (b) to its original/normal state (abstract): *helyre|áll*, *-igazít*, etc. The corpus yielded 14 more verbs, with meanings in these two general areas:

- (32) helyre|biccent 'remedy, set right', -billen 'even out', -billent 'set right', -döngöl 'pound into place', -kalapál 'hammer into shape', -kísér 'escort back to place', -rak 'put back', -rángat 'tug to place', -rázódik 'be jolted back', -rugdal 'keep kicking back to place', -tol 'slide back to place', -tolódik 'be slid back', -utasít 'snub sy'

It is in the concrete meaning that the pattern is more productive; this is where we can easily think of further examples, especially with verbs of motion and verbs of moving something, e.g., *-fut* 'run', *-szalad* 'run', *-biciklizik* 'bike', *-settenkedik* 'sneak', *-bandukol* 'walk slowly', *-gördeszkázik* 'rollerskate', respectively *-ránt* 'wrench', *-rúg* 'kick', *-sarkal* 'kick with heel', *-csúsztat* 'slide', *-bújtat* 'slip', *-vonszol* 'drag', *-nyom* 'push' (all: 'back to place'). On the other hand, productive uses of the abstract meaning can also be found, e.g.:

- (33) Most legalább érzi, milyen nehéz a dolgunk, nekünk, moderátoroknak. Ha rosszkor rosszat szólnak, azt már nem lehet *helyre|alapálni*.

(*Magyar Hírlap*, 22 December 2001, 28)

'Now you see at least how difficult a job we, moderators, have. If we say the wrong thing at the wrong time, it cannot be *set right* any more.'

- (34) Nagy Sándor jónak tartaná, ha a kormány a kiadások csökkentése helyett inkább a bevételek növelésével igyekezne *helyre|billenteni* a költségvetést.

(*Magyar Hírlap*, 5 July 1995, 1)

'Mr Nagy would prefer if the government tried to *balance* the budget by increasing revenues rather than by curtailing public expenditure.'

Further examples with this meaning can also be created, even if with some difficulty (e.g., *helyre|bunkóz* 'correct with a cudgel', *-püföl* 'by pummeling', *-simogat* 'by caressing', *-kőszörül* 'by whetting'). In sum, I submit that the adverb *helyre* also has a place in the system of preverbs.

As concerns *tova*- 'forth, away', ÉrtSz. indeed only contains five verbs with that preverb: *tova|halad* 'proceed', *-siet* 'hurry on', *-száll* 'fly along',

-*terjed* 'spread on', -*tűnik* 'vanish from sight' and Pusztai (2003) not only labels it "rare" but also "elaborate style". On the other hand, the *Magyar Hírlap* corpus yields 21 more items (with 289 occurrences in all). These are as follows:

- (35) *tova|áramlik* 'flow', -*billen* 'tilt', -*döcög* 'wobble', -*fut* 'run', -*gördül* 'roll', -*gyűrűzik* 'ripple', -*hagy* 'leave', -*hessent* 'swat at', -*húz* 'pass', -*illan* 'evanesce', -*nyargal* 'gallop', -*repül* 'fly', -*röppen* 'flit', -*siklik* 'glide', -*sodor* 'whirl', -*sodródik* 'drift', -*suhan* 'swish', -*száguld* 'race', -*úszik* 'swim', -*vádorol* 'wander', -*vitórlázik* 'sail' (all: 'on, along, away')

The meaning of the preverb, it appears, preserves the concrete meaning of the adverb: 'further and further away'. On this basis, it can almost without restriction be coupled with motion verbs as in *tova|kerekezik* 'cycle', -*biciklizik* 'bike', -*motorozik* 'ride (a motorbike)', -*gördeszkázik* 'rollerskate', -*rollerezik* 'ride (a scooter)', -*jetskizik* 'jet ski', or *tova|lebeg* 'float', -*reppen* 'flit', etc. There is but one semantic restriction: the verb must express a movement that is (or can be) performed 'away', 'into the distance'; it cannot be circular or oscillating: **tovakering* 'revolve away', **tovaperdül* 'spin along', **tovahánykolódik* 'be tossed forth', **tovarezeg* 'oscillate away', **tovavibrál* 'vibrate away', etc. On the basis of the above examples, *tova-* may be classified as one of the preverbs, too; although, due to the lack of an abstract meaning, they could also be referred to as adverb-initial compounds.

Is sum, I think that the results of this empirical study have proved how important it would be for productivity investigations to be based on actual corpus data. With productivity tests based on such data it has been demonstrated that *felül-* 'over', *közbe-* 'inter', *helyre-* 'back' (and possibly *tova-* 'forth') may, after all, be classified as preverbs, as is done by both ÉrtSz. and Pusztai (2003). We are entitled to do that especially since they are at least as productive as *tönkre-* 'to ruins' is that Kiefer and Ladányi also claim to be a preverb. True, the former items have a somewhat more concrete meaning, whereas *tönkre* can only be used metaphorically. That is, in this case, the criterion of semantic "opacity" or idiomatic character is more fully met (as expected due to its origin as an idiom chunk). On the other hand, *helyre-* and *felül-* also exhibit secondary, more abstract meanings, too. All in all, I think all four items under scrutiny here meet the set of criteria that Kiefer and Ladányi (2000, 481) formulate for preverbhood. That is: none of them is an argument-type verbal modifier, all of them perfectivise and all of them

can be claimed to be productive. In addition, they meet the dynamic character (or directionality) that Jakab (1976; 1982) insists on. Another point of Jakab's classification system is text frequency: this may be the only criterion that they do not meet—but then, Kiefer and Ladányi do not appear to take this to be crucial, either.²⁰

3. Conclusion

A number of theoretical issues arise with respect to preverbs, as witnessed by Jakab (1982) where a lengthy discussion is found concerning what a number of earlier grammarians had to say about them. For want of a better solution, most authors circumvented the problem of definition and referred to the status of the given items by way of a list. Since then, a number of attempted definitions have been published but linguists are still highly divided over exactly which items should be seen as belonging to the set of preverbs. One of the reasons for that uncertainty may be the fact that we have to do with a relatively recent development—at least as compared to the time span of historical processes that languages undergo—we are faced with a part of speech still in the making.

Another similar class is that of postpositions. They also include earlier ones that are not formally transparent any more and whose semantic transparency or motivation has also been lost due to a concrete → abstract development of their meaning (e.g., *után* 'after': in space → in time). Younger postpositions, on the other hand, are still rather transparent both morphologically and semantically (e.g., *következtében*

²⁰ On the other hand, we can agree with Kiefer and Ladányi that *abba*, *végbe* and *véghez* ['that-illative', 'end-illative', 'end-allative'] are to be deleted from the list of preverbs since the first two only join up with two verbs each (*abbahagy* 'stop doing', *abbamarad* 'be discontinued'; *végbemegy* 'take place', *végbevisz* 'carry out', cf. *hagy* 'leave', *marad* 'remain', *megy* 'go', *visz* 'carry') and the third is used with a single verb only (*véghezvisz* 'accomplish'). These, then, are lexicalised complex verbs and not preverb+verb combinations. The status of *félbe*- ['half-illative'] is a real borderline case: the combination patterns of that item are less productive than those discussed in the text. ÉrtSz. contains four verbs with it: *félbehagy* 'stop doing', *félbemarad* 'be discontinued', *félbeszakad* 'be cut short', *félbeszakít* 'break sg off' (cf. *szakad* 'be torn', *szakít* 'tear') and only a few further examples can be found in the *Magyar Hírlap* corpus, too: *félbehajt* 'fold in two', *-hajtódik* 'be folded in two', *-harap* 'bite into two', *-metsz* 'cut into two', *-tör* 'break into two', *-vág* 'cut into two'. In these, a strong adverbial meaning can be detected, so much so that some of these could even be spelt as two words.

‘in consequence of’). Also, the set of postpositions is partially open: further items may additionally start turning into postpositions: an instance is *magasságában* ‘at the altitude of’ in the still somewhat mannered temporal sense ‘around, at roughly’.

The same can be said of preverbs. In the ancient members of the class, their morphological transparency has totally ceased to exist; but even relatively younger ones like those going back to postpositions include non-transparent items (like *keresztül* ‘across’, *túl* ‘over’). Other — especially younger — items may still have a transparent morphological structure (e.g., *újra* ‘again, lit.: new-sublative’, *végig* ‘fully, to the end, lit.: end-terminative’). This set is partially open, too. Thus, it is impossible to predict whether *halálra* ‘to death’ will become even more widespread than it is today, becoming a proper preverb. This is because it has already grown out of the role of a mere idiom chunk: it can join a relatively large number of verbs whereas real idiom chunks can only join one or two. Of course, this process can be affected by the influence of other languages, too: recall the case of *ellen-* ‘counter’ often joining nominal (rather than verbal) bases or the expression *felültöltős (mosógép)* ‘top loader’.

It appears that wherever morphological transparency has not been totally lost, semantic non-transparency can be attested instead in most cases. This applies especially clearly to *agyon-* and *tönkre-*, both going back to idiom chunks. In the former case, the meaning of the stem has undergone a change (*agy* ‘skull’ → ‘brain’), whereas in the latter case the relevant meaning of the stem is not quite clear for language users (*tönk* ‘a stump in water’ or ‘wood-cutting block in the yard’). Even if semantic transparency is also maintained, an adverb may still turn into a preverb. It is enough for its meaning to become minimally more abstract; what is required is that productive patterns of association should come into being. It is on the basis of such productivity considerations that verbs involving *tovább-* ‘on’, *végig-* ‘to the end’, or *újra-* ‘again’ can be seen as preverb+verb combinations.

It appears that directional meaning is another important factor of being a preverb:²¹ there are hardly any non-directional preverbs in Hun-

²¹ *Agyon* with its superessive inflection seemingly contradicts this generalisation, but it is in fact at least partly directional in meaning: the very literal/original meaning of *agyonvág* ‘hit on the head’ can be paraphrased as *fejen vág* (‘head-superessive + hit’) but rather as *fejbevág* (‘head-illative + hit’). In addition, *agyon* later underwent semantic change and assumed a perfectivising, or rather exaggerative function as in *agyonbeszél* ‘talk too much about’ or *agyonhallgat* ‘kill by silence’.

garian. What the reason for that may be is surely a very complex issue but it is possible that cognitive factors also play a role. As Pléh (2000, 1010) points out, “in human thinking, aims/targets are in the forefront. The appearance of TARGET in spatial expressions in fact reflects the organisation of an intentional act, a cognitive preference”.

As in the case of all other linguistic items, it may also occur in the historical development of preverbs that some of them stop short before evolving into a full preverb: the adverbial element becomes dated, or mannered. This is what happened to *által* ‘through, by (means of)’ that has been supplanted both as a postposition and as a preverb-like anterior constituent by the shorter, hence more economical version *át* ‘through, across, over’ (as a postposition only in a local or a temporal sense). ÉrtSz. still considers it to be a preverb, and lists 18 verbs involving it (*által|ad* ‘hand over’, *-cikázik* ‘flash across’, *-esik* ‘fall through’/‘get over with’, *-fog* ‘clasp’, *-hajt* ‘drive through’, *-hat* ‘imbue’, *-hág* ‘infringe’, *-jár* ‘go across (frequently)’/‘permeate’, *-lát* ‘see across’, *-lép* ‘step over’, *-megy* ‘go over’, *-nyújt* ‘hand over’, *-önt* ‘pour over’, *-üt* ‘show through’/‘hit across’, *-vág* ‘cut through’, *-ver* ‘pierce’, *-vesz* ‘take over’, *-vet* ‘sling over’). In the *Vasárnapi Újság* corpus, I found 18 more verbs (*által|cserél* ‘change over’, *-él* ‘experience’, *-enged* ‘relinquish’, *-ereszt* ‘let (pass) through’, *-érez* ‘be aware of’, *-hoz* ‘bring over’, *-jön* ‘come over, come through’, *-karol* ‘embrace’, *-szivárogo* ‘ooze through’, *-szúr* ‘stab (through)’). On the contrary, Pusztai (2003) already labels *által* as “rural” and “obsolete”, and lists only 3 verbs with it (*által|jár*, *-lép*, *-megy*). In the *Magyar Hírlap* corpus, too, only six such items can be found, two of them in citations from 19th-century texts. The real number, then, is four. If we consider token frequency, these forms also turn out to be rather rare: all four occur but once in the *Magyar Hírlap* corpus, and even in *Vasárnapi Újság*, all verbs occurred once except *által|ad* ‘hand over’ with 23 occurrences.²²

²² These numbers refer to preverbs in preverbal position: since *által* is found on its own 3102 times in the corpus but most of the time as a postposition, I have not individually checked all the data where it stands alone to see whether there are some preverbs (split from their verbs) among them. It is to be noted furthermore that the preverb *egybe* ‘together, into one’ has had a somewhat similar progress: it showed fusion patterns with a number of verbs already in the age of codices, ÉrtSz. lists 44 such preverb-verb combinations, and *Magyar Hírlap* contains a lot more. Therefore, it is in fact difficult to see why Kiefer and Ladányi omit it from among Hungarian preverbs, as it is listed as such in Jakab (1982). It is, however, beyond reasonable doubt that *egybe* is in retreat today in that *össze* ‘together’ will/may oust it analogically from a number of combinations.

As far as the size of the stock of Hungarian preverbs is concerned, Pais (1959) already states that the difference between an adverb and a preverb is not so much that of kind, rather that of degree. Hence, rather than debating whether a given item has already turned into a preverb or is still an adverb, it is more expedient to employ the “centre vs. periphery” model of the Prague School. Thus, there are preverbs that are in a fully central position, including the “ancient” preverbs, especially *meg-* that was originally a directional adverb ‘to behind’ just like *be-* ‘in’, *ki-* ‘out’, *le-* ‘down’, and *fel-* ‘up’, but has practically completely lost its directional meaning (‘to behind it’ → ‘back’), and is used to express metaphorical meanings (mainly perfectivity) today. Right after *meg-*, the next most central preverb is *el-* that still retains its meaning ‘away’ but its perfective or inchoative function is a lot stronger. The next concentric circle would be where the four preverbs of ancient origin referred to above are located: these express direction as well as various metaphorical meanings. An even less central circle would be where later items that have preserved more of their adverbial meaning and character like *hátra-* ‘to the back’, *félre-* ‘to the side’, *körül-* ‘round’, *ide-* ‘here’, *oda-* ‘there’, *szét-* ‘apart’, *össze-* ‘together’, as well as those going back to postpositions: *alá-* ‘to under’, *elé-* ‘to the front’, *fölé-* ‘to above’, *mellé-* ‘to beside’, *át-* ‘through’, *keresztül-* ‘across’, *túl-* ‘beyond’ are found. These are bulkier than the items on the inner circles, they preserve their individuality more than those, but their morphological transparency has been lost, facilitating their changes in terms of parts of speech: case-marked noun → adverb → preverb (/postposition). Another, more peripheral circle is occupied by *agyon-* ‘over, to death’ and *tönkre-* ‘over, to ruins’ that started their careers as idiom chunks, and are morphologically transparent but semantically less so (due to the semantic change, respectively vagueness, of their stems—see above). An even more peripheral set comprises adverb-based *újra-* ‘again’, *tovább-* ‘further on’, *végig-* ‘to the end’ that are both morphologically and semantically transparent and can only be taken to be preverbs due to their frequent occurrence and productivity. The outermost circles are occupied by items of debated status, ones that certain grammars take to be preverbs while others do not. The more peripheral a given item is in this system, the larger share productivity has in the definition of its status: if it can turn into a fully productive pattern as time goes by, its way is open towards increasingly inner circles. For instance, *újra* ‘again’, lit. ‘new-sublative’ is both morphologically and semantically quite transparent and only occurs in 8 verbs in ÉrtSz. but it

shows a remarkably productive pattern in the *Magyar Hírlap* database, of which only some very recent items will be listed here to finish with: *újrabootol* ‘reboot’, *újraír* ‘rewrite’, *újranyomtat* ‘reprint’, *újrakábelez* ‘re-wire’, *újratemet* ‘rebury’, *újraprivatizál* ‘re-privatise’, *újraéleszt* ‘revive, resuscitate’, etc.

Abbreviations

BécsiK.	= Bécsi Kódex (after 1416/around 1450)
CornK.	= Cornides-kódex (1514–1519)
DomK.	= Domonkos Kódex (1517)
ÉKsz.	= Pusztai (2003)
ÉrdyK.	= Érdy-kódex (1524–1527)
ÉrtSz.	= A magyar nyelv értelmező szótára I–VII [A dictionary of definitions of Hungarian]. Akadémiai Kiadó, Budapest, 1959–1962.
JókK.	= Jókai-kódex (after 1372/around 1448)
JordK.	= Jordánszky-kódex (1516–1519)
MargL.	= Margit-legenda [Margaret legend] (1510)
NyKk.	= Grétsy–Kovalovszky (1980–1985)
NySz.	= Szarvas–Simonyi (1890)
PeerK.	= Peer-kódex (around 1518)
TESz.	= Benkő, Loránd (ed.), A magyar nyelv történeti-etimológiai szótára I–III [A historical-etymological dictionary of the Hungarian language]. Akadémiai Kiadó, Budapest, 1967–1984.

References

- Deme, László 1959. A nyomatéktalan mondat egy fajtájáról. Az *ott* határozószó ige-kötőszerű használata [On one type of non-emphatic sentences. The preverb-like use of the adverb *ott* ‘there’]. In: Magyar Nyelv 55: 185–98.
- É. Kiss, Katalin 1998. Mondattan [Syntax]. In: Katalin É. Kiss – Ferenc Kiefer – Péter Siptár: Új magyar nyelvtan [A new Hungarian grammar]. 15–184. Osiris Kiadó, Budapest.
- Fleischer, Wolfgang 1997. Phraseologie der deutschen Gegenwartssprache 2., durchgesehene und ergänzte Auflage. Niemeyer, Tübingen.
- Grétsy, László – Miklós Kovalovszky (eds) 1980–1985. Nyelvművelő kézikönyv I–II [A handbook of language cultivation I–II]. Akadémiai Kiadó, Budapest.
- Jakab, István 1976. A magyar ige-kötők állományi vizsgálata [A study of the stock of Hungarian preverbs] (Nyelvtudományi Értekezések 91). Akadémiai Kiadó, Budapest.
- Jakab, István 1982. A magyar ige-kötő szófajtani útja [The development of Hungarian preverbs among parts of speech] (Nyelvtudományi Értekezések 112). Akadémiai Kiadó, Budapest.

- Kiefer, Ferenc (ed.) 2000. Strukturális magyar nyelvtan 3. Morfológia [A structural grammar of Hungarian 3. Morphology]. Akadémiai Kiadó, Budapest.
- Kiefer, Ferenc – Mária Ladányi 2000. Az igeekötők [Preverbs]. In: Kiefer (2000, 453–518).
- Klemm, Antal 1928. Magyar történeti mondattan I [A historical syntax of Hungarian I]. Pécsi Egyetemi Könyvkiadó és Nyomda, Budapest.
- Komlósy, András 1992. Régenek és vonzatok [Valence and government]. In: Ferenc Kiefer (ed.): Strukturális magyar nyelvtan 1. Mondattan [A structural grammar of Hungarian 1. Syntax], 299–527. Akadémiai Kiadó, Budapest.
- Langacker, Ronald W. 1977. Syntactic reanalysis. In: Charles N. Li (ed.): Mechanisms of syntactic change, 57–139. University of Texas Press, Austin.
- Mátai, Mária D. 1992. Az igeekötők [Preverbs]. In: Loránd Benkő – Erzsébet E. Abaffy (eds): A magyar nyelv történeti nyelvtana. 2/1. kötet: A kései ómagyar kor: morfeumatika [A historical grammar of Hungarian. Volume 2/1: Late Old Hungarian: morphematics], 662–95. Akadémiai Kiadó, Budapest.
- Pais, Dezső 1959. Az igeekötők mivoltához és keletkezéséhez [On the status and origin of preverbs]. In: Magyar Nyelv 55: 181–4.
- Pléh, Csaba 2000. A magyar morfológia pszicholingvisztikai aspektusai [Psycholinguistic aspects of Hungarian morphology]. In: Kiefer (2000, 951–1020).
- Pusztai, Ferenc (ed.) 2003. Magyar értelmező kéziszótár. 2. átdolgozott és bővített kiadás [A concise dictionary of definitions of Hungarian. 2nd, revised and enlarged edition]. Akadémiai Kiadó, Budapest.
- Sebestyén, Árpád 1965. A magyar nyelv névutórendszere [The system of postpositions in Hungarian]. Akadémiai Kiadó, Budapest.
- Soltész, Katalin J. 1959. Az ősi magyar igeekötők [Hungarian preverbs of an ancient origin]. Akadémiai Kiadó, Budapest.
- Somhegyi, Gyula 1988. Monofrazémák a magyarban I. Valódi monofrazémák [Monophrasemes in Hungarian I. Monophrasemes proper]. In: Magyar Nyelvőr 112: 357–68.
- Somhegyi, Gyula 1992. Monofrazémák a magyarban II. Ál-monofrazémák [Monophrasemes in Hungarian II. Pseudo-monophrasemes]. In: Magyar Nyelvőr 116: 437–48.
- Szarvas, Gábor – Zsigmond Simonyi (eds) 1890. Magyar nyelvtörténeti szótár a legrégebbi nyelvelmélektől a nyelvújításig I. [A historical dictionary of Hungarian from the earliest records until the time of language reform I]. Hornyánszky Viktor Akadémiai Könyvkereskedése, Budapest.
- Szemere, Gyula 1965. Helyesírási segédkönyv a középiskolák számára [A spelling manual for secondary schools]. Tankönyvkiadó, Budapest.
- Temesi, Mihály 1961. Az igeekötők [Preverbs]. In: József Tompa (ed.): A mai magyar nyelv rendszere I [The system of present-day Hungarian I], 263–7. Akadémiai Kiadó, Budapest.

Address of the author: Tamás Forgács
Department of Hungarian Language
and Literature
University of Szeged
Szeged, Egyetem u. 2.
H-6722 Hungary
forgacs@hung.u-szeged.hu

CAN ‘NOTHING’ BE GRAMMATICALISED? COMMENTS ON PERMIAN VOWEL ~ ZERO ALTERNATIONS*

MICHAEL GEISLER

Abstract

The aim of this paper is to present the most salient characteristics of Permian vowel ~ zero alternations and to analyse them in terms of grammaticalisation. The term ‘grammaticalisation’ will be used here in a non-traditional sense. When we investigate grammaticalisation, it is not merely individual linguistic units (having turned into grammatical ones), but also **relationships** between linguistic units that are to be taken into consideration. If, for instance, a phonological relationship that originally obtained between certain forms and triggered the application of some automatic process turns into a non-automatic alternation that distinguishes linguistic units from one another, this is just as much an instance of grammaticalisation as the well-known cases in which an originally lexical item turns into a grammatical one. This hypothesis will be substantiated in this paper with the help of some considerations concerning Permian vowel ~ zero alternations.

1. Introduction

It is one of the most characteristic features of the morphonologies of the Permian languages and Hungarian alike that the second vowel of certain stems may be dropped when the stem is suffixed and two open syllables come to stand in sequence. This phenomenon will be called **vowel ~ zero alternation** here, following Péter Siptár’s and Miklós Törkenczy’s analysis on Hungarian (Siptár–Törkenczy 2000; Törkenczy–Siptár 2000). In Permian, this kind of alternation occurs relatively often in derivation but very rarely in nominal inflection. Examples (K = Komi, U = Udmurt):

- (1) (a) before a derivational suffix:
K *janas* ‘separately’ ~ *jans-əd-* ‘separate’ (verb)
K *lēdēs* ‘surrogate’ ~ *lēts-al-* ‘replace’

* The author wishes to thank participants of the BUM conference for their comments on his presentation.

K *getj̄r* 'wife' ~ *getr-al-* 'get married'

K *voškov* 'step' (noun) ~ *vošl-ɛn* 'with a step' (instrumental)

U *kijed* 'dung' ~ *kijd-o* 'dungy'

U *gudj̄ri* 'thunder' (noun) ~ *gudj̄r-jal-* 'thunder' (verb)

U *kužj̄m* 'strength' ~ *kužm-o* 'strong'

U *ćumolo* 'barn' ~ *ćumol-t-* 'erect a barn'

(b) before an inflectional suffix:

K *ordēs* 'side' ~ *ords-ijn* 'on the side' (inessive)

U *joros* 'vicinity' ~ *jors-ĭ* 'to' (illative)

(where *jors-* is a postpositional stem)

The quality of the vowel alternating with zero does not play a decisive role in the Permian languages. Any vowel standing in the second syllable may be dropped. In Hungarian, where vowel ~ zero alternation is also rather widespread, most alternations with zero involve one of the mid vowels *ĕ*, *o*, *ō*:

(2) *reték* 'radish' ~ *retk-ek* (pl); *terem* 'hall' ~ *term-ek* (pl)

elsodor 'sweep away' ~ *elsodr-ódik* 'be swept away'; *bagoly* 'owl' ~ *bagly-ok* (pl)

füröd- 'bathe' ~ *fürd-ik* (3sg), *fürd-és* 'bathing'; *vödör* 'bucket' ~ *vödr-ök* (pl)

vacak 'something worthless' ~ *vack-ok* (pl); *bajusz* 'moustache' ~ *bajsz-ot* (acc);

őriz 'guard' (3sg indef) ~ *örz-i* (3sg def)

The last three examples are exceptional.¹

Both in Permian and in Hungarian (H), a large number of words fail to exhibit vowel ~ zero alternation despite the presence of the phonological circumstances mentioned:

(3) H *csődör* 'stallion' ~ *csődör-ök* (pl), *szurony* 'bayonet' ~ *szurony-ok* (pl)

(and not: **csődrök*, **szurnyok*)

K *kelj̄d* 'turn pale' ~ *kelj̄d-al-* (perf), *miger* 'body' ~ *miger-a* 'corpulent'

U *podem* 'beehive' ~ *podem-al-* 'make a beehive', *gurež* 'hill' ~ *gurež-ož* 'as far as the hill'

¹ For a phonological analysis of the Hungarian examples, cf. Vago (1980, 80–1, 116–7); Siptár-Törkenczy (2000, 214).

2. Some typological aspects of vowel \sim zero alternations

Vowel \sim zero alternations occur in morphonologies of a number of Indo-European languages, too. The following examples will not be analysed in detail; they are only given here to give an impression of the typologically widespread nature of the phenomenon.

- (4) German *München* 'Munich' \sim *Münchn-er* 'inhabitant of Munich'
Atem 'breath' \sim *Atm-ung* 'breathing'

In German, only schwa — that only occurs in noninitial syllables — can alternate with zero.²

- (5) Russian *камень* /ka·miń/ 'stone' \sim *ка́мня* /ka·mń+a/ (genitive)
сон /son/ 'dream' (noun) \sim *снётся* /sn+i·ť+ša/ 'dream' (verb)

In Russian, only the two mid vowels — *e* and *o* — can be dropped.³ The alternation may also involve the vowel of the initial syllable.

3. On the grammatical function of alternations

3.1. Morphonological phenomena

Morphonological phenomena can be classified into four groups as follows:

- (i) Free alternation: H *fel-megy* \sim *föl-megy* 'go up', Russian *žen-a* 'wife' \sim (instrumental) *žen-oj*, *žen-oju*: two or more allomorphs of a morpheme can be freely interchanged.
- (ii) Automatic alternation: K *kǐv* 'language' \sim *kǐl-is* 'his/her language' (Px3sg): the alternation takes place under well-determined phonological conditions (/l/ \rightarrow [v] / —\$).⁴
- (iii) Non-automatic alternation: U *nǐl* 'girl' \sim *nǐl-i* 'my girl' vs. *gurt* 'village' \sim *gurt-e* 'my village' (Px1sg). The alternation does not have a phonological motivation: it takes place whenever two particular morphemes are concatenated. This means that specific morpho-

² On the phonological analysis of German schwa, cf. Wiese (1996, 243).

³ On the phonological analysis of the Russian alternation, cf. Zaliznjak (1987, 29–30); Hristova (1994).

⁴ \$ = syllable boundary.

gical information is required with respect to the stems that participate in this kind of alternation.

- (iv) Grammatical alternation: German $i \sim a \sim u$: *sing-en* \sim *sang* \sim *ge-sung-en* 'sing' [infinitive – preterite stem – past participle]: non-automatic alternation that signals some difference in grammatical function, i.e., one that serves a morphological purpose. In agglutinative languages, such alternations usually occur very rarely (Honti 1975, 25; Panzer 1995, 71–2).

Applying this four-way classification to the material presented earlier, we have to state that our case must be that of non-automatic alternation. It appears that the other three types do not occur in conjunction with the vowel \sim zero alternations in Permian.

3.2. Doublets

However, there is a host of examples that contradict our hypothesis. In these, along with forms participating in the alternation at hand, the full form (with the stem vowel of the second syllable retained) also occurs. The two versions cannot be freely interchanged as they differ in meaning. Examples:⁵

(6) KOMI

- (a) *dorış* P 'edge, margin' \sim *dorış-áš-ni* P 'catch up with one's neighbour in
haymaking (by mowing a narrower
strip)'
 \sim *dorš-áš-ni* P 'gather in sy's eyes (said of tears)'

(Wichmann–Uotila 1942, 29; Batalova–Krivoščekova–Gantman 1985, 128)

- (b) *žugił* VU 'sad' \sim *žugił-áš-ni* VU 'be sad'
 \sim *žugl-áš-ni* VU 'hesitate'

(Fokos-Fuchs 1959, 180)

- (c) *kežed* Lu 'snow used for' \sim *kežed-av-ni* Lu 'cool with snow'
cooling in cellar' \sim *kezd-av-ni* Lu 'get wet (e.g., matches)'

(Žilina et al. 1961, 169–70)

- (d) *mížik* VU 'blow with the fist' \sim *mížik-av-ni* VU 'blow (sy's head) with
one's fist'
 \sim *mížg-av-ni* VU 'push (down), compress'

(Sorvačeva 1978, 132)

⁵ Abbreviations: Komi dialects: Lu = Luza, P = Permyak, VU = Lower Vichегда; Udmurt dialects: G = Glazov, Ka = Kazan, S = Sarapul.

(7) UDMURT

- (a) *lapeg* 'low' ~ *lapeg-om̃i-ñi* 'become low'
 ~ *lapk-om̃i-ñi* 'calm down, sit down'
 (Vahrušev et al. 1980, 252)
- (b) *pertem* G 'different; diverse' ~ *pertem-a-ñi* G 'change' (transitive)
 ~ *pertm-a-ñi* G 'variegate; persuade; change'
 (Wichmann 1987; Vahrušev et al. 1980, 194)
- (c) *p̃ir̃ič* 'scoop, chisel' ~ *p̃ir̃ič-a-ñi* S 'scoop with a chisel'
 ~ *p̃irt̃č-a-ñi* (< **p̃ir̃čañi*) S 'scoop out, gouge out; copulate'
 (Munkácsi 1896, 561, 563)
- (d) *p̃is̃i* S 'hole' ~ *p̃is̃i-jal-* S 'make a little hole'
 ~ *p̃is-jal-* S 'thread (a needle)'
 (Munkácsi 1896, 556)
- (e) *šulem* 'heart' ~ *šulem-o:* *žob š.* 'heartless' ('hard-hearted')
 ~ *šulm-o* 'courageous' ('brave-hearted')
 (Vahrušev et al. 1980, 194)
- (f) *šures* 'road, path' ~ *šures-o* 'having a road'
 ~ *šurs-o* 'striped'
 (Wichmann 1987, 240; Vahrušev et al. 1980, 407)
- (g) *todem* Ka 'knowledge; acquaintance' ~ *todem-o* Ka 'clever, knowledgeable'
 ~ *todm-o* Ka 'known, familiar'
 (Munkácsi 1896, 362)

All these examples share an interesting common feature: the derivative in which vowel ~ zero alternation is not involved (e.g., U *pertemañi* 'change') is semantically less removed from the base (*pertem* 'diverse, different'), whereas the derivative that does exhibit the alternation is semantically more opaque (*pertmañi* 'variegate; persuade'). We have to add here that a similar phenomenon can be observed in Hungarian, too (both in cases with some other type of alternation (8a), and in vowel ~ zero cases (8b)):

- (8) (a) *idő* 'time': *időtlen* 'timeless' ~ *idétlen* 'born prematurely (obs.); misshapen; untimely'
- (b) *éber* 'alert': *éberen* 'watchfully' ~ *ébren* 'awake'
 (Bencédy et al. 1988, 110, 112)

In the Hungarian literature, such cases are referred to as "lexical fission". Similar cases (again, not of the vowel ~ zero type) can be found in German or in Finnish, too:

- (9) (a) German *Sache* ‘thing; affair, object’: *sachlich* ‘material; objective’ ~ *sächlich* ‘neutral’
 (b) Finnish *yksi* [stem: *yhte-*] ‘one’: *yksinäinen* ‘lonely’ ~ *yhtenäinen* ‘uniform, homogeneous’

The Finnish example differs from the Hungarian or German examples given in that the genitive stem is used productively there (as opposed to *idé-*, *ébr-*, or *säch-*).

4. On the analysis of the doublets

Two issues have to be discussed with respect to the double derivatives seen in the Permian examples above: How did such form pairs come into being? (section 4.1); In what sense can we speak of grammaticalisation in such cases? (section 4.2).

4.1. How did such form pairs come into being?

The historical explanation of these examples is uniform: the original derivative was affected by the “two-open-syllable sound law” and the vowel of the second syllable was regularly dropped in them. When that tendency ceased to be an active phonological process, the transparent phonological relationship characteristic of productive paradigms became opaque. Subsequently, a semantic change occurred in that the meaning of the derivative also became opaque and the word became an independent lexical item.

The other member of the form pairs can be explained in view of the productivity of some derivational suffixes in several historical periods of Permian. The denominal verb forming suffix *-al-* (Kneisl 1978, 61–2)⁶ was attached to the same stem that it had been attached to before (under different circumstances), but now the “two-open-syllable sound law” was no longer active. This is how the doublets came into being.

⁶ This suffix can be added even to the most recent Russian loanwords: K: *student* (← Russian *студѐнт*) ‘student’ ~ *student-al-* ‘be a student’: (me) *student-al-a* [Vx1sg present] ‘I am a student’, U *pastux* ‘herdsman’ ~ *pastux-al-* ‘work as a herdsman’.

4.2. Is this a case of grammaticalisation?

According to the traditional usage, the term “grammaticalisation” refers to a historical process whereby originally independent lexical items turn into grammatical ones. The question arises whether that term could be used in a wider sense. It must not be overlooked that it is not only lexical items that may become part of the grammatical system, but also **the relationships** that are contracted by those items. Returning to the title of this paper, it is not “nothing” that is grammaticalised here, but rather the alternation with “nothing”.

This idea can be made more explicit by a pattern consisting of several stages. Consider the history of the processes involving Udmurt *śulem* ‘heart’ as an example.

1. **śulem-o* ‘having a heart, -hearted’. Both the stem and the pattern of derivation are productive. The morpheme *śulem* has only one allomorph.
2. As a second step, the two-open-syllable tendency resulted in the loss of the vowel of the second open syllable, hence an automatic $e \sim$ zero alternation. The allomorph *śulem* appeared before consonants and the allomorph *śulm-* before vowels. This regularity applied in all similar cases.
3. Next, the validity of the tendency came to an end.
4. But the productive adjective forming suffix *-o* went on to derive further forms such as *lipet-o* ‘roofed’, *keseg-o* ‘bit by bit’, *sereg-o* ‘angular’ (without $e \sim$ zero alternation in the second syllable). This means that the former automatic $e \sim$ zero alternation that used to be purely phonologically conditioned now turned into a non-automatic one.
5. As a fifth step, semantic change occurred: the original meaning of *śulmo* *‘having a heart, -hearted’ evolved into the new meaning ‘courageous’. The original allomorph *śulm* thus turned into an independent lexical item (Shapiro 1975). Given that the two stems, *śulem* ‘heart’ and *śulm-o* ‘courageous’ are both semantically and morphologically distinct, they have to be considered two distinct morphemes. The item *śulm-* is a **bound stem morpheme** that only exists in the given derivative (a “cranberry morpheme”). This stage is summarised in Table 1.

Table 1

Stage 5 of the development of *śulem* ~ *śulm-*

Morpheme	{ <i>śulem</i> }	{ <i>śulm-</i> }
Allomorph I (nominative singular)	<i>śulem</i>	∅
Allomorph II (stem allomorph in derivative)	<i>śulem-</i>	<i>śulm-</i>

6. The form *śulem-o* 'having a heart, -hearted' is derived a second time with the productive suffix. From now on, we have to do with a grammatical alternation. The non-automatic $e \sim \emptyset$ alternation corresponds to a semantic distinction, hence vowel ~ zero alternation now has a distinctive role, it serves to **differentiate lexical meanings**.

- (10) {*śulem*} 'heart'
 {*śulm*} '??' [\neq 'heart']

The foregoing can be summarised as in Table 2.

5. Summary

In my view, the traditional claim that the above cases involve **lexicalisation** cannot be questioned. However, I want to emphasise that such cases of lexicalisation are characterised by the fact that an originally phonological alternation is systematically exploited and given a grammatically distinctive function. In this sense, a special case of grammaticalisation is also involved. It can be clearly demonstrated by these examples that grammaticalisation follows (rather than precedes) lexicalisation (Lehmann 2002). However, the phenomenon is not very widespread: the grammatical system of Permian languages exploits such alternations to a rather limited extent to date.

References

- Batalova, R. M. – A. S. Krivoščekova-Gantman 1985. Коми-пермячко-русский словарь. Русский язык, Москва.
- Bencédy, József – Pál Fábíán – Endre Rácz – Mártonné Velcsov 1988. A mai magyar nyelv [Present-day Hungarian]. Tankönyvkiadó, Budapest.
- Fokos-Fuchs, David Rafael 1959. Syrjänisches Wörterbuch I–II. Akadémiai Kiadó, Budapest.
- Honti, László 1975. System der paradigmatischen Suffixmorpheme des wogulischen Dialektes an der Tawda. Akadémiai Kiadó, Budapest.

Table 2
The development of the morpheme *śulem* ~ *śulm*

	Surface form	Morphological level		Morphonological process	Semantic process	Phonological process
		morphological process	relationship of morphemes			
1.	* <i>śulem-o</i> ‘-hearted’	derivation [stem, suffix: productive]	one morpheme, one allomorph: { <i>śulem</i> }	—	—	—
2.	* <i>śulem-o</i> > * <i>śulmo</i>	—	one morpheme → two allomorphs: { <i>śulem</i> , <i>śulm</i> }	$e \sim \emptyset$ automatic alternation emerges: { <i>śulem</i> } → <i>śulem</i> / $_ \$$ { <i>śulm</i> } → <i>śulm</i> / $_ \bar{V}$	—	two-open-syllable sound law
3.	—	—	—	—	—	validity of sound law comes to an end
4.	<i>lipet-o</i> ‘roofed’ <i>keseg-o</i> ‘bit by bit’ <i>sereg-o</i> ‘angular’	further derivations [stem, suffix: productive]	—	automatic → non-automatic alternation [phonological distribution lost]	—	—
5.	<i>śulmo</i> ‘-hearted’ > ‘courageous’	—	two morphemes, independent both in meaning and in form: { <i>śulem</i> }, { <i>śulm</i> }	—	semantic change: abstraction	—
6.	<i>śulem-o</i> ‘-hearted’	derivation [stem, suffix: productive]	—	distinctive function of the alternation $e \sim \emptyset$: $e \sim \emptyset = m_1 \sim m_2$ { <i>śulem</i> } ‘heart’ { <i>śulm</i> } ‘??’ [\neq ‘heart’]	—	—

- Hristova, Vanya Alexieva 1994. Nominal vowel-zero alternations in Bulgarian and Russian. University Microfilms International, Ann Arbor.
- Kneisl, Marianne 1978. Die Verbalbildung im Syrjänischen (Veröffentlichungen des Finnisch-Ugrischen Seminars an der Universität München. Serie C: Miscellanea, Band 9). D. Traut, München.
- Lehmann, Christian 2002. New reflections on grammaticalization and lexicalization. In: Ilse Wischer – Gabriele Diewald (eds): New reflections on grammaticalization (Typological Studies in Language 49), 5–21, John Benjamins, Amsterdam & Philadelphia.
- Munkácsi, Bernát 1896. A votják nyelv szótára – Lexicon linguae votiacorum. Magyar Tudományos Akadémia, Budapest.
- Panzer, Baldur 1995. Das Russische im Lichte linguistischer Forschung. Fink, München.
- Shapiro, Michael 1975. Morphophonemics as semiotic. In: Acta Linguistica Hafniensia 15: 29–49.
- Siptár, Péter–Miklós Törkenczy 2000. The phonology of Hungarian. Oxford University Press, Oxford.
- Sorvačëva, V. A. 1978. Нижневыхогодский диалект коми языка. Наука, Москва.
- Törkenczy, Miklós–Péter Siptár 2000. Magánhangzó ~ semmi váltakozások a magyarban [Vowel ~ zero alternations in Hungarian]. In: Nyelvtudományi Közlemények 97: 64–130.
- Vago, Robert 1980. The sound pattern of Hungarian. Washington D. C., Georgetown University Press.
- Vahrušev, V. M. – A. S. Belov – N. A. Skobelev – T. I. Tepljašina 1980. Удмуртско-русский словарь. Русский язык, Москва.
- Wichmann, Yrjö 1987. Wotjakischer Wortschatz. Bearbeitet von T. E. Uotila und M. Korhonen. LSFU XXI. Suomalais-ugrilainen seura, Helsinki.
- Wichmann, Yrjö–Toivo Eemil Uotila 1942. Syrjänischer Wortschatz nebst Hauptzügen der Formenlehre. LSFU VII. Suomalais-ugrilainen seura, Helsinki.
- Wiese, Richard 1996. The phonology of German. Oxford University Press, Oxford.
- Zaliznjak, A. A. 1987. Грамматический словарь русского языка. Русский язык, Москва.
- Žilina, T. I. – M. A. Saharova – V. A. Sorvačëva 1961. Сравнительный словарь коми-зырянских диалектов. Коми книжное издательство, Сыктывкар.

Address of the author: Michael Geisler
 Institut für Finnougristik
 Ludwig-Maximilians-Universität München
 Ludwigstr. 31/III
 D-80639 München
 Germany
 geisler.michael@gmx.de

OBJECTIVE CONJUGATION AND MEDIALISATION

FERENC HAVAS

Abstract

This paper is concerned with the origins and the function of the objective verbal conjugation especially in Hungarian but with an eye to general typology and Uralic. Previous attempts at solving problems associated with it are given a critical survey. The author argues that since objective conjugation is neither specific to Hungarian nor to its relatives, whether close or distant, but is found in various language families and language types all over the world, one should seek explanations in universal tendencies rather than giving ad hoc accounts. The universal tendency of medialisation is pointed out here—especially in the first and second persons of the paradigm—, which differentiated what is now called the (unmarked) general or indefinite conjugation from the original unitary conjugation. It is here proposed that what now functions as the objective conjugation results historically from a reinterpretation of the original paradigm as in contrast with the medial (then general) paradigm. This explains the curious fact that although the objective paradigm is now seen as the new marked member of the opposition, it is this paradigm that preserves the personal endings going back to the ancestral pronouns. The author also argues that the emergence of an objective conjugation in those Uralic languages that have one represents independent developments, though the preconditions for its evolution may have been there in Proto-Uralic in the form of object syntagms.

1. The development of finite or person-marked verb forms is, in all cases, a textbook example of grammaticalisation. Even if it involves only the attachment of personal pronouns to verbs, which is the most archaic and, in all likelihood the most general, way leading to a verbal paradigm, the fact that in this process the pronoun loses its autonomous syntactic function (e.g., that of subject) and turns instead into the exponent of a grammatical category within the verb phrase means that it assumes a function that it was originally not meant to fulfil—at least in that way. This is even clearer when the emerging person-marker¹ originally had not had that function. Perhaps there is not a single language in which at least

¹ The term person-marker here does not refer to suffixes only, as it exclusively does in the Hungarian grammatical tradition, but to any morpheme that marks the person of the subject or some compulsory complement on the verb itself. It may be realised as a prefix, an infix, a suffix or a clitic.

one series of person markers does not originate from personal pronouns (PPs), but if a language possesses several series of person-markers (Vx-es), there is a good chance that some of these do not derive from PPs. A Vx that does not derive from a PP is likely to have undergone several distinct grammaticalisation processes.

This paper discusses that type of verbal conjugations which are called — if not always correctly — objective systems. It is obvious that this belongs to the domain of grammaticalisation, since if objective paradigms did not always exist, as they clearly did not, they must have come about through processes of grammaticalisation. We shall focus on the relevant paths of development in the Hungarian verbal system (and will propose a theory of our own, like so many others have done before), but in doing so we shall relate our findings to two broader fields of research: Uralic linguistics and typology. By the latter we simply mean the non-genetic, non-areal, but purely structural comparison of languages. It does not require much explanation that objective verbal paradigms are not unique to either Hungarian or its closer or more distant relatives but can be found in totally unrelated and typologically dissimilar languages/families. It thus seems reasonable to step back and take a broader look.

2. In order to arrive at a reliable survey of the world's languages in terms of the existence and the properties of an objective conjugation we first have to give a definition of what we are actually looking for. This is all the more important since the phenomena we mean or should mean by the term "objective conjugation" are, in fact, highly disparate and differ along a number of dimensions — this is the reason for the proliferation of the relevant terminology in the literature.

We suggest, first of all, "object-dependent verbal conjugation" as a general term to be used in discussing these phenomena. This does not refer to a specific verbal paradigm but simply to the fact that a given language possesses such a distinction. What is thereby distinguished is generally an object-oriented vs. a non-object-oriented verbal conjugation. A language possesses object-dependent verbal conjugation if it fulfils two criteria:

2.1. There are finite verbs in the language (i.e., there is a verbal conjugation).

2.2. The orientation of the verb towards the object is expressed by some dedicated morphological element or special formation. This can be realised in two ways:

2.2.1. Formatives outside person-marking, such as infixation (e.g., in Vogul), thematic vowel differences (e.g., in Ostyak), clitic elements (French and Italian etc. unstressed pronouns probably belong here), in some cases derivational morphemes (e.g., in Indonesian) or some form of stem-internal inflection on the verb etc.

2.2.2. Within person marking, in which case there are at least two sets of Vx-es and the choice between the two is determined by the object in some way.

3. Object-dependent verbal conjugation, defined as above, may fall into a variety of patterns. Its types can be classified according to three independent parameters: function, morphology and extension.

3.1. Functionally one may distinguish between extensive and intensive object-dependence.

3.1.1. A pattern is called extensive if the conjugations of transitive vs. intransitive verbs differ consistently. The traditional Hungarian terms *alanyi* 'subjective' and *tárgyas* 'objective' should, in theory, be applied to such languages only. In principle, extensive object-dependence can also be of two kinds:

3.1.1.1. In a lexically rigid system transitive verbs are realised as such in all cases, even if in a particular instance they occur without an object — as in semantically medial use. In such a language a verb like *write* would be conjugated transitively even in a sentence like *this pen writes well*. Transitive and intransitive conjugations in these languages (but only in these languages) mean separate verb classes ('conjugations' in the traditional sense of the word). Lak and Kashmiri appear to belong to this type, and a set of North-West Iranian languages appear to belong here too, such as Gurani, Lasgerdi, Meimei etc., as far as their past tenses are concerned.

3.1.1.2. In a structure-dependent system transitive verbs are conjugated as such only when the sentence actually has an object or, depending on the language, only when the sentence actually does not have an object. In such languages, two different verb conjugations would appear in *he is eating* vs. *he is eating bread*.

3.1.2. Intensive object-dependence means that transitive verbs are conjugated in a specific way only when accompanied by some salient type of object, otherwise their forms coincide with those of (some type of) intransitive verbs. In a general sense this may be referred to as a distinction between determinate vs. indeterminate verbal conjugation, and its subtypes are defined by what salience of object means in a given system.

3.1.2.1. Definiteness of the object (definite vs. general conjugation). Hungarian is a case in point (if one disregards the suffix *-lak/-lek* '1sg subj. 2sg obj.').

3.1.2.2. Specific number and person of the object. Here belong all languages where finite verbs forms are selected in accordance with the combination of subject and object, e.g., Mordvin. (The intransitive category may itself be composite, as in the Northern Samoyedic languages, where it includes a subjective and a medial conjugation.) The prominence hierarchy can be regarded as a subtype of this category; it means that the objective conjugation is used as a function of the relation between the number and person specifications of the subject compared to those of the object. Chukchee, Koryak and Kamchadal are languages like that. Interestingly, if the Hungarian suffix *-lak/-lek* is interpreted as belonging to the objective conjugation, this language can also be assigned to this class (more precisely, to this class as well).²

3.1.2.3. The object is salient in some other way. This class is actually a collection of various patterns, which further analysis may well show to constitute disparate subclasses. Such "other" triggers of objective conjugation include position next to a focussed verb (Yukaghir, perhaps

² On this see É. Kiss (2003). Classifying the suffix *-lak/-lek* as objective currently contravenes the orthodoxy of Hungarian descriptive grammar. We think that semantic considerations (independently of É. Kiss's arguments, which are based on Comrie 1980) as well as the comparative evidence of Finno-Ugric — e.g., Mordvin, which shows fundamentally the same pattern — point unequivocally to the suffix being object-oriented. Theoretically, it cannot be otherwise: its choice is determined solely by second person objects, as opposed to other *Vx1sg*'s. Claims to the opposite err in that they equate 'objective' with 'having a definite object', which cannot be interpreted with reference to first and second persons, at least in Hungarian (or, if it can, *engem* 'I-acc' and *téged* 'you.sg-acc' certainly qualify as definite).

Nenets, partly Ob-Ugric),³ the number of the object independently of its person (Ob-Ugric) or the semantic class of the object (Avar), etc.

3.1.2.3.1. It may be regarded as a subtype of objects “salient in some other way” when the formation of the transitive construction depends not on structural but on use-related, contextual factors like, for instance, the speaker’s ad hoc semantic intentions (as in Tundra Nenets).⁴

3.1.2.3.2. Several factors may combine in a given language (in Hungarian, for instance, both the definiteness and the person of the object play a role in the choice of the conjugation).

3.2. Apart from function, object-dependent verbal conjugation can be classified morphologically as well. For simplicity, let us take a closer look only at the person-marking pattern.⁵ We can distinguish two major types:

3.2.1. Analytic: person-markers on verbs are — or demonstrably were — composite, i.e., separate portions of them refer(red) to the subject and the object, respectively. Mordvin is an instance and so is the Hungarian suffix *-lak/-lek* if its *-l-* element is etymologically identical to the *Vx* of *játszo-l* ‘you play’.⁶

3.2.2. Synthetic: the person-markers are not composite at all, or do not arise as a combination of different *Vx*-es, thus the exponent of the subject and the exponent of the object cannot be separated in them either synchronically or diachronically. This is clearly the case in Hungarian, especially in the singular (*láto-m* ‘I see it’ etc.).

3.3. The third criterion relates not to what the object-dependent verbal conjugation is like in itself but to its extension, i.e., whether the distinction between object-oriented and non-object-oriented conjugation per-

³ Whether Samoyedic and Ob-Ugric belong here is, in fact, less and less certain. Körtvély (2003b) unequivocally proves the opposite for Tundra Nenets, and personal communication with several experts seems to indicate that Ob-Ugric was also erroneously analysed as belonging to this class.

⁴ See Körtvély (2003b).

⁵ It may well be the case that this distinction holds for other patterns too, but since this question is irrelevant for our present query, the historical study of the Hungarian objective conjugation, we shall disregard it.

⁶ In fact, the *-l-* of *-lak/-lek* certainly refers descriptively to the object even if it is not of a *Vx* origin, since the *-k* element definitely refers to the 1sg subject only. In that case, however, the suffix *-lak/-lek* belongs rather to **3.1.2.3.2.**

vades the entire system of transitive verbs and the constructions they are parts of or whether it is incomplete in some respect. Two different kinds of incompleteness can be observed which, for simplicity, will again be referred to as extensive vs. intensive incompleteness.

3.3.1. Extensive incompleteness means that a well-defined subset of transitive verbs does not take part in object-dependent contrasts. Such is the case of Tundra Nenets, where a certain group of transitive verbs displays rigid, but the larger part intensively object-dependent, behaviour.⁷

3.3.2. Intensive incompleteness means that object-dependent verbal conjugation is confined to certain numbers, persons, tenses, moods etc. in a given language. In a set of Iranian languages, for instance, objective conjugation exists only in the past tense.

3.3.3. While not a separate type in its own right, one may mention unsystematic incompleteness here, which means a combination of **3.3.1** and **3.3.2** type criteria (only certain verbs display object-dependent features in only certain grammatical categories), or a state of the system where the majority patterns do not hold for certain specific items defined by a variety of criteria — lexical or grammatical remnant forms. This is an extremely frequent phenomenon. Conspicuous examples can be taken from Hungarian, where the distinction is neutralised in the 1sg present indicative forms of ‘pristine *ik*-verbs’ (*eszem* ‘I eat’), in the 1sg past indicative of all transitive verbs (*láttam* ‘I saw’) as well as in 1pl and 2pl conditional forms (*látnánk, látnátok* ‘we/you would see’).⁸

4. Despite all these differences, the languages that display object-dependent verbal conjugation constitute a unitary class as opposed to languages that lack finite verbs or have only one conjugation — at least from the point of view of the object.

4.1. The following languages, classified according to families for the sake of exposition, possess object-dependent verbal conjugation (typographical distinctions will be discussed later):

⁷ Körtvély (2003a, 97).

⁸ It is, of course, true that in the first and last two of these four forms the neutralisation of the distinction only holds in a narrow synchronic sense. In 1pl conditional *látnánk* used to be an indefinite form in contrast to *látnók*, and for *ik*-verbs indefinite forms like *eszek* are quite general in non-standard varieties, in which then *eszem* is reclassified as definite.

- (1) Uralic: *Hungarian*, Vogul, Ostyak, *Mordvin*, *Enets*, *Nenets*, *Nganasan*, *Selkup*.
 Caucasian: (Kartvelian:) Georgian, *Mingrelian*, Chan, (Nahi-Daghestanian:) Lak.
 Paleo-Siberian: Chukchee, *Koryak*, Kerek, Yug and Ket, *Kot*, *Yuit*, Naukani, *Itelmen*, *Greenlandic*.
 Indo-European: (Dardic:) Kashmiri, Pashai, (South-West Iranian:) *Middle Persian*, (North-West Iranian:) *Parthian*, Beluj, *Gurani*, *Lasgerdi*, *Biyabuneki*. *Aftari*, *Meimei*, *Jawshakani*, *Khunsari*, *Vonishuni*, *Kāviri dialects*, *Sivandi*, (East Iranian:) Yida-Munji, Jagnobi, Ossetic.
 Australian: *Wunambal*.
 American Indian: *Alaskan Yupik*, *Cree*.
 Sino-Tibetan: *Dyurang*.
 African: Swaheli (and other Bantu languages).

This is, of course, not meant to be an exhaustive survey of the world's languages — that would be beyond our subjective as well as objective capacities —, but it will be enough to demonstrate that object-dependent verbal conjugation as a phenomenon is independent of the genetic relations of languages. Apart from a few specific cases, those showing object-dependent verbal conjugation belong to entirely different families, and, on the other hand, while this may not be clear from the above, but is still warranted by our general knowledge of language families, closely related languages may well differ from each other in this respect. Furthermore, if the various subtypes of object-dependent verbal conjugation are taken into account, closely related languages showing this feature may be representatives of different subtypes, as are Hungarian, Ob-Ugric and Mordvin, which belong to three different subtypes (more precisely, three different principles of transitivity) within the set of those Finno-Ugric languages that actually display object-dependent verbal conjugation. The same is seen if we try to classify these languages typologically. The existence of verb forms as such is, of course, a morphological prerequisite, thus strictly isolating languages are out of question, but agglutinating, fusional and incorporating types are all represented within the above list. Syntactically these languages are partly nominative, partly ergative,⁹ but in the majority of languages showing the same two syntactic patterns ob-

⁹ I have not been able to survey active languages from this respect, though the question could be investigated if we substituted patients for objects. Assuming transitivity in ergative languages also involves taking the absolutive next to a transitive verb to be an object.

ject-dependent verbal conjugation does not exist. If, finally, we locate these languages geographically, even this small sample will make it clear that the occurrence of object-dependent verbal conjugation is independent not only of genetic and typological but also of areal traits.

4.2. Since the ultimate goal of our survey is a comparison with Hungarian, we have indicated in the list the extent to which these languages can be regarded as similar to Hungarian (strictly in terms of what the objective conjugation is like). Languages in italics display object-dependence mainly in the person-markers, whereas in the languages shown in bold the Vx-es in question are synthetic at least in part. No genetic, typological or areal correspondences (of a non-coincidental kind) are found here, either. Looking at the Uralic languages, including those that have no object-dependent verbal conjugation as well as those that have it, and which, as seen above, belong to three different subtypes, one may well wonder whether the Hungarian objective conjugation is of Uralic provenance. This is all the more so given that the following — unrelated — languages show a system very similar to that of Hungarian:

4.2.1. Aftari (North-West Iranian language, spoken in the Semnan-region, shares this feature with closely related dialects Lasgerdi and Biyabuneki).¹⁰ Here belongs its past declension, of which the singular objective endings are synthetic:

(2)	Intransitive verbs		Transitive verbs	
	Sg	Pl	Sg	Pl
1	<i>-i</i>	<i>-im</i>	<i>-(u)m</i>	<i>-mun</i>
2	<i>-a</i>	<i>-in</i>	<i>-(u/o)t</i>	<i>-tun</i>
3	<i>-â</i>	<i>-en</i>	<i>-(o)š</i>	<i>-šun</i>

This being an Indo-European language it is clear that the series deriving from personal pronouns (*-m*, *-t*, *-š*) is present in the object-oriented (here transitive) set of suffixes (with an added number morpheme in the plural), whereas the intransitive verbs display a different set of suffixes not deriving from PP-s. This distribution strongly resembles that seen in Hungarian.

4.2.2. Greenlandic (Paleo-Siberian, Esquimaux-Aleutian).¹¹ Here we give the personal endings of the singular paradigm. Since we have no data on

¹⁰ Based on Yaziki mira... (1999, 165–6).

¹¹ Based on Yaziki mira... (1997, 97–8).

the personal pronouns, we compare the Vx-es of the transitive conjugation with the Px-es (possessive personal suffixes).

- (3) Px-es: 1sg -*ya*, 2sg -*t*, 3sg -*á*.

Intransitive conjugation: 1sg -*uŋa*, 2sg -*utit*, 3sg -*voq*.

Transitive conjugation:

Object:	me	you	him
Subject:			
I	—	- <i>kit</i>	- <i>ya</i>
you	- <i>yma</i>	—	- <i>t</i>
he	- <i>áŋa</i>	- <i>áti</i>	- <i>á</i>

As can be seen, with 3sg objects — much like in Hungarian — synthetic Vx-es coincide with Px-es, for which the most probable explanation is that they derive from the same personal pronouns.

4.3. Further investigation of the languages with object-dependent verbal conjugation leads to the observation that the use of original personal pronouns in the object-oriented, rather than the unmarked, conjugations frequently occurs with analytic person-marking as well, though it is by no means unexceptional. Some examples follow.

4.3.1. Ersa objective endings:¹²

(4)	Object:	me	you-sg	him	us	you-pl	them
	Subject:						
	I	—	- <i>tan</i>	- <i>sa</i>	—	- <i>tadiž</i>	- <i>siŋ</i>
	you-sg	- <i>samak</i>	-	- <i>sak</i>	- <i>samiž</i>	—	- <i>siť</i>
	he	- <i>samam</i>	- <i>tanzat</i>	- <i>si</i>	- <i>samiž</i>	- <i>tadiž</i>	- <i>siŋze</i>
	we	—	- <i>tadiž</i>	- <i>siŋek</i>	—	- <i>tadiž</i>	- <i>siŋek</i>
	you-pl	- <i>samiž</i>	—	- <i>siŋk</i>	- <i>samiž</i>	—	- <i>siŋk</i>
	they	- <i>samiž</i>	- <i>tadiž</i>	- <i>siž</i>	- <i>samiž</i>	- <i>tadiž</i>	- <i>siž</i>

As will be seen at first glance, the similarities are especially transparent vertically (i.e., in relation to the object) rather than horizontally (i.e., in relation to the subject) in that in forms referring to a first person object *-*m*, in forms referring to second person objects *-*t*, and in relation to a third person object perhaps *-*s(i)* seems to appear consistently. This is exactly what one should expect if the marking of objects is related to the original Finno-Ugric personal pronouns. Similar etymologies cannot be given for subject markers.

¹² Based on Feoktistov (1966, 188ff).

4.3.2. Koryak (Paleo-Siberian, Chukch-Kamchatkan language, ergative), leaving aside dual forms:¹³

Personal Pronouns: 1sg *gimmo*, 2 *gičči*, 3 *inno*, 1pl *muju*, 2 *tuju*, 3 *ičču*.

For transitive verbs the respective subject-marking prefixes are: *tj-*, *k(u)-*, *ne-*, *mjt-*, *ko-/ku-*, *na(ku)-/ne(ku)-*.

The object-marking suffixes are:

(5)	Object:	me	you-sg	him	us	you-pl	them
	Subject:						
	I	—	- <i>gi</i>	- <i>in</i>	—	- <i>tjk</i>	- <i>neú</i>
	you-sg	- <i>ŋ</i>	—	- <i>in</i>	- <i>mjk</i>	—	- <i>neú</i>
	he	- <i>ŋ</i>	- <i>gi</i>	- <i>nin</i>	- <i>mjk</i>	- <i>tjk</i>	- <i>nin</i>
	we	—	- <i>ge</i>	- <i>in</i>	—	- <i>tjk</i>	- <i>nin</i>
	you-pl	- <i>tjk</i>	—	- <i>itki</i>	- <i>mjk</i>	—	- <i>itki</i>
	they	- <i>gim</i>	- <i>gi</i>	- <i>in</i>	- <i>mjk</i>	- <i>tjk</i>	- <i>neú</i>

As can be seen, neither the subject-marking prefixes, nor the object-marking suffixes relating to the subject (horizontally) can be related to personal pronouns, but, at the same time, there is a clear connection (vertically) between the person of the object and the PP-s in second person in both numbers as well as in 3sg and 1pl. (All the three series of morphemes—PP-s, subject-marking prefixes and object-marking suffixes—share a 1pl *-m*, the pre- and suffixes also share a 3pl *-n*, but this latter cannot be associated with the corresponding PP.)

4.3.3. Alaskan Yupik/Yuit (ergative, dual forms omitted):¹⁴

(6)	(a)	Intransitive endings:	sg	pl				
			1	- <i>ŋa</i>	- <i>kut</i>			
			2	- <i>tən</i>	- <i>ci</i>			
			3	- <i>θ</i>	- <i>t</i>			
	(b)	Transitive endings:						
		Object:	me	you-sg	him	us	you-pl	them
		Subject:						
		I	—	- <i>mkən</i>	- <i>ka(θ)</i>	—	- <i>mci</i>	- <i>nka(θ)</i>
		you-sg	- <i>pəŋa</i>	—	- <i>n(θ)</i>	- <i>pəkut</i>	—	- <i>tən(θ)</i>
		he	- <i>ŋaŋa</i>	- <i>ŋatən</i>	- <i>ŋa(θ)</i>	- <i>ŋakut</i>	- <i>ŋaci</i>	- <i>ŋi(θ)</i>
		we	—	- <i>mtyan</i>	- <i>put(θ)</i>	—	- <i>mtci</i>	- <i>put(θ)</i>
		you-pl	- <i>pəciŋa</i>	—	- <i>ci(θ)</i>	- <i>pəcikut</i>	—	- <i>ci(θ)</i>
		they	- <i>ŋatŋa</i>	- <i>ŋatyan</i>	- <i>ŋat(θ)</i>	- <i>ŋitkut</i>	- <i>ŋitci</i>	- <i>ŋit(θ)</i>

¹³ Based on Yaziki mira... (1997, 49–50).

¹⁴ Based on Miyaoka (1996, 328–9).

As can be seen here, too, the intransitive (“subjective”) endings occur in the objective endings of the transitive paradigm (represented vertically), which means that they refer to the object rather than the subject here.¹⁵ (These endings correspond to items in the rather intricate personal pronoun system of Yupik in the first person as well as in 2pl; if the \emptyset ending derives from an original non-zero element, then at two more points. Interestingly, the corresponding pronominal elements also occur as suffixes on unrelated stems.)

4.3.4. There are languages with analytic conjugations in which the Vx-es or portions of Vx-es deriving from personal pronouns refer to the subject but only on transitive verbs. North-West Iranian languages are of this type (Meimei, Jawshakani, Khunsari, Vonishuni, Kāviri dialects, Sivandi).¹⁶

4.4. As will be apparent even from this limited set of examples, the Hungarian object-dependent conjugation — in which original Vx-es can be associated with the object-oriented (or objective) rather than the non-object-oriented (or general) conjugation — is, in fact, not entirely specific to the Uralic family, let alone specific to this language. It follows from this that its evolution should not be explained with reference to specifically Uralic or specifically Hungarian developments. In line with this suggestion, we will develop in what follows an interpretation that is at once universalistic and applied to a particular language in proposing a new hypothesis. But in order to do this we must first survey what earlier explanations we mean to relate to.

5. Let us then take a look at the major types of explanations proposed in the literature for the historical development of the Hungarian subjective vs. objective (or indefinite/general vs. definite) contrast. The brief discussions below and the objections made are not put forward as an exhaustive listing of whatever has been said on this topic before us, and at each point we will only give a few references representative of the ideas under discussion instead of a full list. On certain occasions, particular

¹⁵ With respect to ergative languages this appears fairly trivial since it simply involves the agreement of the verb with the noun in absolutive case/function. Nevertheless this means that the morphological makeup of verbs coincides exactly where, in a nominative terminology, we speak of the subject of intransitive verbs and the object of transitive verbs.

¹⁶ Of other languages perhaps Naucan Esquimaux belongs here.

theories will be referred to by some name other than is usual. This is done in order to facilitate their comparison.

5.1. Agglutination hypothesis¹⁷

According to this hypothesis, when the objective conjugation was formed, the morphological structure of the verb consistently reflected the three functions to be denoted: action + object + subject. This is exemplified to this day by forms like *vár-já-tok* 'you are waiting (for it etc.)'. The item *-j-* derives from a personal pronominal element. Forms that now consist of two elements only used to be composed of three, e.g., *várom* 'I am waiting (for it)' going back to something like **vár•-j•-m*.

This hypothesis of the origin of Hungarian objective conjugation is no longer held by anyone. It proved untenable on a phonological basis: the disappearance of the hypothetical object-marking morpheme of the form **j•* (and the corresponding syllable) is wholly unparalleled. It is also left unexplained that in the first and second persons singular it was the object-marking element that disappeared, whereas in the first and third persons plural it was the subject-marking element.

5.2. Possessive Px hypothesis

This has two versions, which may be termed semantic vs. syntactic.

5.2.1. According to the semantic version,¹⁸ the objective verb forms have always consisted of two parts and not of three, they never referred to the object. Objective Vx-es go back to Px-es, the original meaning of forms like *várom* 'I am waiting (for it)' is 'my waiting'. This is supposed to reflect an archaic way of thinking in which the action denoted by the verb is seen as the possession of the speaker. When the verb was accompanied by an object, the ending simultaneously or sequentially acquired the function of referring to the agent as well as the definiteness of the object.

The chief argument against this hypothesis is that deriving the Vx-es from possessive person-markers is semantically implausible. Even if the base of the future objective verb form was regarded as a *nomen-verbum*

¹⁷ Hunfalvy (1862), Budenz (1890–1892).

¹⁸ It is probably correct to say that this was the majority view up to the 1970's. The originator of the idea may have been Thomsen (1912), the idea being picked up by Melich (1913). It was also propounded by the purported standard textbook of Finno-Ugric studies (Osnovi 1974, 321) and persisted until the very end of the century (Lommel 1998).

(which only could have made it possible for it to take Px-es), it is not at all clear why in a verb + object structure the action rather than the object would be understood as a possession. This possessive interpretation is supported by nothing else than the idea that the morphemes in question are supposed to have been Px-es, thus the argumentation is circular. Furthermore the nomen-verbum hypothesis in itself must be rejected if we note that in Pre-Hungarian, probably the period of the emergence of the objective conjugation, nouns and verbs were already very clearly distinguished and even the very few ambiguous stems that existed could not be found in both functions at the same time; thus their categories did not lend themselves to analogical transfer.¹⁹

5.2.2. According to the syntactic version²⁰ Px-es were reinterpreted as Vx-es in sentences with a participial predicate. The reanalysis then took the following form:

(7)	<i>hal/halam</i>	(a) <i>nő</i>	<i>főzte</i>
	(my) fish	(the) woman	cooked
1. original	subject	possessor	nominal predicate (participle)
2. innovative	object	subject	verbal predicate

This explanation crucially depends on the hypothesis that the object as well as the possessor were originally unmarked.

The objection against the previous explanation, viz. that in Pre-Hungarian, the period when the language was already separated from its relatives, nouns and verbs were no longer undifferentiated, cannot be made here. This argument is based on participles, whose dual nature is evident (hence their traditional name), and their appearance within the verbal conjugation is well known for both Indo-European and Finno-Ugric. We can also make no objection against the hypothesis that the object as well as the possessor were unmarked. The problem lies elsewhere. In its supposedly original meaning this sentence type ('The fish is the woman's cooking') seems rather eccentric even for Pre-Hungarian and, since it predicates an acquired trait of the subject, it is, as a consequence, highly restricted. Transitive verbs that do not assign a new characteristic to the subject could hardly, if at all, be involved ('the fish is the woman's seeing, eating, wanting, waiting' etc. as answers to the question 'what is the fish like?'). It is also not clear why this participial sentence type

¹⁹ This objection is made by Rédei (1989, 180).

²⁰ Klemm (1928–1942, 119–20).

could not consist of a predicate and an indefinite, rather than a definite, subject ('a fish is the woman's cooking'), but such constructions did not give rise to an objective conjugation. In this explanation it is also tacitly assumed that the objective conjugation developed in the past tense, since the present forms *főzöm*, *főzöd*, *főzi* 'I/you/he cook(s)' cannot originate from (predicative) participles, which would be a prerequisite for attaching a Px. What this implies is that present objective forms all developed on the analogy of the past objective forms — which is by no means implausible, but certainly needs further confirmation. It is also to be noted that in the third person such deverbal nouns with Px often differ from the corresponding verb form in Modern Hungarian: *főztje* 'his/her cooking' vs. *főzte* 'he/she cooked'. This explanation would thus imply that — at least in 3sg forms — the current shape of the Px is a later development relative to the shape from which the (objective) Vx is supposed to have been originated. In sum, while all this does not falsify the hypothesis, it also definitely does not make it look plausible.

5.3. Non-possessive Px-hypothesis²¹

In this hypothesis, objective Vx-es are related to Px-es, though not in a possessive sense, but — similarly to their original function — as markers of definiteness, in particular the definiteness of the subject. It is this determinative role that explains why original PP elements appeared in the objective conjugation. The function of determining the subject was then reinterpreted as a function of determining the object. In 1sg there was, in the beginning, only *-m*, but "there was a clear tendency in the language to distinguish the subjective and the objective conjugations (also in 1sg) with different person-markers; and to achieve this, of the 1pl person-markers *-uk/-ük* (turning later into *-ok/-ök* through the lowering of the vowels) was reinterpreted as a 1sg person-marker".²² An analogous process took place in Finnish as well: the plural marker *-t* in *meidät* 'us' appears in 1sg: *minut* 'me'.

The following objections can be made against this hypothesis. The shift from the function of determining the subject to the function of determining the object is highly dubious even in the third person — all we know for sure is that the Vx in question now marks the definiteness of the object. If it ever marked the definiteness of the subject, we would

²¹ Rédei (1962).

²² Rédei (1962, 427).

expect it to turn up in the subjective conjugation too, since the subject can also be definite. In 1sg and 2sg, however, this idea makes no sense whatever, given that the subject (I, you) need not and indeed cannot be made more definite than it is. The reinterpretation of *-k* from plural marker to a singular Vx is also implausible because in 2pl and 3pl the same segment can only be analysed as a plural marker in comparison with the corresponding singular forms and thus it is hard to understand how this could have been “overlooked” in 1pl, a form morphologically parallel to the other two. (The *meidät* → *minut* change is not really a good analogy in that in *meidät* the *-t* is already a marker of the accusative as well and it was in that capacity that it was carried over to *minut*, whereas the *-k* in *-uk/-ük* does not refer to first person.)

5.4. Depassivisation hypothesis²³

This hypothesis presupposes that the 3sg forms **vár-já/kér-i* ‘he waits/asks’ could also be used in a passive sense, and in that case the *-já/-i* (going back ultimately to Proto-Finno-Ugric **se*) refers to a passive 3sg subject (‘he is waited for/he is asked’). This was accompanied by the exponent of the active subject, as can be seen e.g., in 2pl: *várjá-tok/kéri-tek* ‘you wait for him/ask him’). The same stands for forms like 1sg *váro-m*: *vár•-* was originally a composite form: *vár•* + \emptyset , where \emptyset is the exponent of the passive subject (= active object) ‘he is waited for’, to which then *-m* is added as the marker of the 1sg subject, thus ‘he is waited for by me’ = ‘I wait for him’ (mutatis mutandis in 2sg).

This hypothesis is either self-contradictory or is based on unproved premises. Let us begin with the forms **vár-já/kér-i* ‘he waits/asks’, which supposedly include the agglutinated third person pronoun. If this latter really referred to the subject (next to a semantically passive stem), it could not have been suffixed further as in *vár-já-tok* ‘you wait for him’ because in this form two different subjects would have been marked. If, however, the element *-já-* happens to refer to the object (which would explain the emergence of the form *vár-já-tok*), then the stem could not have been understood as passive, and consequently the assumption that it was passive in the first and second persons is either totally unfounded—and unparalleled in the third person—or the stem was not passive even in the first and second persons, whereby the entire explanation is undermined. The only possibility left is that *-já-* was **originally** added to

²³ Papp (1942; 1968), generally known as condensation or resuffixation theory.

a passive stem, but the whole form was later—but before the emergence of the plural forms—reinterpreted as active. There is no more evidence for this than for the assumption that the stem was interpreted as passive in the first and second persons. Nevertheless the explanation clearly has a certain elegance to it: the stem was originally passive in all the three persons in the singular, the Vx-es deriving from original PP-s mark the subject, then the forms are reinterpreted as active and the Vx-es are reanalysed as markers of (third person) definite objects, and the third person marker thus appears as such in the plural forms. The indefinite conjugation may have been formed in contrast to the definite paradigm when the verb stems had already been reinterpreted as active (otherwise the meaning of *várok* would not have differed from that of *várom*). However, there is a price to pay for the elegance of the argument. This is the two unproved assumptions on which it is founded, viz. that transitive verbs were originally interpreted as passive and that the Vx-es were reanalysed as markers of a third person object. Furthermore, not even a passively interpreted verb stem guarantees that its subject (later object) should be understood as definite, thus the derivation would be impeccable only if transitive verbs in Hungarian could only be conjugated according to the objective paradigm (or, as a third assumption, the definiteness of the object must be included).²⁴ In addition, if such a reanalysis of the 1sg and 2sg suffixes could be proved, assuming the depassivisation of the stem would be rendered superfluous,²⁵ since the question is not whether the latter was ever regarded as passive, but why *-m* and *-d* (< **t*) refer to the object (too) and why they happen to be part of the definite paradigm. In sum, the depassivisation theory is elegant at the cost of in fact assuming everything it sets out to explain.

²⁴ And there is a fourth, hidden, point here: what are we to say about intransitive verbs? If in the case of transitive verbs the pronouns referred to the subject, we could expect them to appear on intransitive verbs as well (since the subject is third person there as well), or, alternatively, we have to claim from the beginning that in Pre-Hungarian intransitive verbs were semantically always active, whereas transitive verbs were always passive, which would then explain the zero-morpheme intransitive forms. Such an account would not be absurd at all—for instance, in a language with an active syntactic pattern or in the reconstructed prehistory of an ergative language such a state of affairs would be highly in harmony with the structure in general—but the nominative nature of Hungarian as well as the comparative Finno-Ugric evidence preclude this assumption for Pre-Hungarian.

²⁵ The Vx in *váro-m* refers to the subject and is to be reanalysed as claimed above even if the stem of the verb form was always active.

5.5. The object pronoun hypothesis

This exists in two forms: in one, the pronoun in its pure form, in the other the pronoun in the accusative case, was putatively agglutinated to the relative verb stem.

5.5.1. The first version²⁶ is based on the assumption that the agglutinated third person pronoun was a marker of the definite object already in the proto-language. If accompanied by an indefinite object, or no object at all, the verb form used was the pure stem without person-markers or a form including a participial suffix. The chief and perhaps original role of the objective forms was anaphoric (i.e., it was used in the absence and instead of an actual object). The participial form then — precisely because it marked no person — infiltrated into the first and second persons (in the indefinite conjugation). To distinguish between subjective and objective forms participles were used and all of the subjective endings may have been participial suffixes.

The problem with this explanation is again that it only applies to the 3sg, not to the other two persons. The **-me* and **-te* of the first two persons could not have been anaphoric at all: they could not originally refer to the object since in the syntactic environment of the verb form not the object but the subject was first or second person. An analogical explanation — viz. that it was only the addition of the PP that was copied from the 3sg — will not do either. Besides running into the same semantic problem, it also presumes that in the present tense *-m* and *-d* (< **t*) did not actually occur in 1sg and 2sg, respectively, before the emergence of the definite 3sg form, which is virtually impossible; suffice it to refer to the past tense, where *-m* is also found in the indefinite conjugation.

5.5.2. In the other version,²⁷ too, it is held that the pronoun originally had an objective-anaphoric function, but it is assumed that in the definite conjugation it is the accusative form of the personal pronoun that served as the ancestor of *Vx*, and it is emphasised that a personal pronoun object could not possibly be in the nominative case. The longer pronominal forms are more likely indeed because the endings in the objective conjugation are more like *Px-es* than like indefinite *Vx-es*, of which the former clearly appear in the Finnic languages to have been longer originally than *Vx-es* (cf. *kanna-n* but *talo-ni* etc.), the personal pronouns

²⁶ Rédei (1989).

²⁷ Honti (1996; 1998/1999)

in these cases also seem to have taken a genitive ending. The place of the personal pronoun in the accusative was — in harmony with the SOV pattern — immediately before the Vx (though, in fact, in 3sg, where the objective conjugation was actually born, this Vx was zero, consequently the pronoun marked as object could soon assume the function of marking the 3sg subject). This system probably only existed in the third person for a long time, but with time it was analogically extended into the first and second persons, i.e., the element deriving from PP-3sg-acc appeared in these forms as well before the subject-marking Vx-es — in contrast to the corresponding indefinite forms. The same may have happened later to forms expressing first and second person objects. All this is not a hypothesis about the precursor of current objective conjugations but about the proto-language.

This hypothesis is very much like the agglutination hypothesis mentioned as the first in this discussion above in its general principles (though not in its particulars), in that while deriving its putative history it arrives at the same ideal and transparent pattern: the indefinite and the definite forms of the same person and number differ consistently in the presence vs. absence of the element marking the object (here PP+acc). While we do not dispute the potential relevance of this hypothesis with respect to Proto-Uralic and Proto-Finno-Ugric (although the VOS morpheme sequence of the emerging verb forms is hardly coherent with the SOV sentence pattern — given that it matters greatly **what** the object precedes in the penultimate position, and but a very small number of languages of the sentence pattern VOS is known to exist anyhow —, and a further surprising consequence of the hypothesis is that the objective conjugation is not predicted to have emerged where it is now actually found but to have withered away where it is not. . .), we can certainly claim that in explaining the actual formation of the objective conjugation in Hungarian — specifically in the first and second persons — it is of no use whatsoever. Just like the agglutination hypothesis, it fails to explain how the object-marking element could have disappeared from the 1sg and 2sg forms of the definite conjugation (especially without phonological consequences) if this, and only this, was the difference between the corresponding definite and indefinite forms in the respective conjugations. Furthermore, no hint is provided about the origin of the endings found in the subjective paradigm (one may assume, of course, that after the — unexplained — disappearance of the objective element a new solution had to be found

for differentiating the two conjugations; we will return to the problems such an explanation would pose in the next point).

5.6. Parallel accusative hypothesis²⁸

This hypothesis crucially involves the claim that the emergence of the objective conjugation is a development wholly internal to Hungarian. At the beginning of the Pre-Hungarian period the object was unmarked, but after a while the definiteness (the anaphoric, thematic role) of the object had to be marked with a dedicated morpheme. The appearance of the accusative *-t* suffix and of the definite conjugation happened in tandem. When the suffix *-t* was extended from definite objects to objects in general, the marking of definiteness was left to the verbal endings. But this necessitated the introduction of person-markers that did not refer to a definite object. This is how the general conjugation was formed. Furthermore: "It is clear that in the process of the crystallisation of the definite conjugation, in 3sg as well as in 2sg it was a suffix deriving from the personal pronoun that appeared in the paradigm. . ."²⁹ It inevitably follows from this idea that the conjugation of intransitive verbs developed only after, and analogically modelled on, the conjugation of transitive verbs with an indefinite object.

The logic behind this argumentation implies that the first stage there involved unmarked objects and a single type of conjugation. The following steps can then be evaluated depending on whether the claim that the appearance of the accusative *-t* suffix and of the definite conjugation happened in parallel is understood as referring to the entire process or only its inception.

(a) If the claim is interpreted more generally, then in the second stage, which followed a period of a monolithic conjugation and unmarked objects, unmarked indefinite objects stand in contrast to marked definite objects, but the verbal conjugation is still homogeneous, in other words, the definiteness of the object is only marked on the object itself. The third stage can then be envisaged in two different ways. (a/i) In some way there appears a difference between the general and the definite conjugations and the latter indeed assumes the function of marking definiteness. As a consequence, the suffix of the definite object is rendered redundant in that determinative function and is extended to all objects

²⁸ Abaffy (1991, 128).

²⁹ Abaffy (1991, 130).

in the capacity of marking 'object in general'. In this case the emergence of the definite conjugation is—contrary to the hypothesis— independent of the marking of the object. (a/ii) The accusative suffix is extended to all objects while the conjugation remains homogeneous. This means, on the one hand, that the language lost the capacity to mark the definiteness of the object and, on the other hand, that no definite conjugation comes into being. It is impossible to assume a stage at which the conjugation is already definite, while nominals no longer, and verbs do not yet, mark definiteness. Definite and indefinite conjugations can only exist simultaneously, in relation to each other. To say that a certain category is not expressed in a certain language (at a given stage) is equivalent to the claim that that category does not exist in that language (then and there). Any claim to the effect that it is there in principle or that the language requires it despite its absence, is uninterpretable.

(b) If the parallelism between the emergence of the *-t* accusative suffix and the objective paradigm is understood as holding only at the inception of the process, i.e., the marking of the definiteness of the object appeared simultaneously on the object and the verb, then it is implied that the definite object came to be accompanied by verb forms of a definite conjugation, since the earlier verb forms obviously went together with the indefinite objects. But if this was the case then the two conjugations were differentiated already before the extension of the *-t* suffix to all objects and the fact that marking definiteness was "left" to the verbal suffix only need not have led to the appearance of an indefinite conjugation, since it had existed earlier.

The conclusion that we can draw from both (a) and (b) above is that no matter how the two conjugations came to be differentiated in Hungarian, this process cannot have been related in any way to the emergence of the *-t* suffix and the changes in the range of its use.³⁰

³⁰ Note that while Abaffy explains the appearance of the objective conjugation with reference to the suffix *-t*, she also implies the opposite in deriving the 3sg suffix *-ik* from the 3pl suffix *-ik*, viz. that the objective conjugation existed already when the object was still unmarked: otherwise it would be totally impossible to start out from a reanalysis of *a fa török* 'they are breaking the wood' → 'the wood is being broken'. (Given the correspondences *tör* : *tör-i* : *tör-i-k* one cannot think that when the form *török* already existed it was not an objective form—in contrast to the correspondence *tör* : *tör-nek*—since the *-i* < **si* in it is nothing else but the object-marking element. The word *fa*, however, had to be unmarked as object otherwise it could not have been interpreted as subject.) Cf. Abaffy (1991, 125–7).

As for the intrusion of the original personal pronouns into the 2sg objective verb forms in the process of the crystallisation of the definite paradigm, this hypothesis implies either that it only happened along with the appearance of definite objects (what was there earlier on the verb? was it the indefinite ending? does this mean that the *-l*, *-sz* endings are older than *-d* < **-t*? and is then the indefinite paradigm older than the definite?), or that the pronouns had always been attached to the verbs but originally they did not function as endings marking definite objects, which then defuses the argument based on the analogy of the 3sg forms, because, in the case of the latter, it is known for certain that the element *-já/-i* is an addition, i.e., an innovation vis-à-vis the earlier, unsuffixed (or zero-suffixed) form, and that it marked the definiteness of the object from the beginning.

5.7. No suffix hypothesis

The last hypothesis of the emergence of object-dependent conjugation we mention here is based on the assumption that in the beginning there was an unsuffixed subjective and a suffixed objective series of verb forms, of which the latter may have involved postponed PP-s.³¹ This means that in Pre-Hungarian the subjective paradigm included forms like *én vár, te vár, ő vár* 'I/you/he wait(s)' (with a final vowel identical and non-functional in all cases), since only this could later give rise to the *-k*, *-sz*, *-Ø* series. Of this the 1sg was the first to go, as the story of *vagy* 'you are' and *megy* 'he goes' suggests (viz. that these two could both be 2sg and 3sg),³² and the current forms of 2sg are later developments.

³¹ Gombocz (1930); Nyíri (1974); Wacha (1974); Juhász (1999) etc.

³² What this means in particular is that *megy* and *mégy* used to be one and the same and that *vagy* could also be a third person form as the pristine mascot names *Mavagy*, *Nemvagy* attest. (In this context the etymologies of the conjunctions *vagy*, *avagy* 'or' can also be mentioned, but these presuppose that the analysis of the verb forms suggested above is right, and cannot be taken as the only possible explanation anyhow.) We think that this argumentation is not difficult to find fault with. *Megy* and *mégy* probably never occurred in one and the same variety of the language, the 2sg vs. 3sg contrast goes back, in all likelihood, to an earlier *mégy* ↔ *mén* or *megyen* contrast, and *megy* (ending in an affricate, which cannot have developed word-finally) either shortened from *megyen* or assimilated analogically to the forms of the other persons. The final consonant of *mégy* and the (compensatory) lengthening of its vowel (just like that of other apparently suffixless stem-2sg forms like *lész* 'you will be') is in want of an explanation anyway, and it is most likely that there was an earlier suffix after the stem. The

This hypothesis appears to us unfounded. First let us note that the most important question, viz. why verbs complemented with a definite object should be conjugated differently from other verbs is not even posed, but it is simply presupposed that this has always been the case. (Thus the explanation for the emergence of the objective conjugation is that it has always been there.) The claim regarding the stem of the indefinite Vx series is similarly erroneous: this series of suffixes may have emerged not only through agglutination to a pure stem but also through the replacement of earlier agglutinated endings. But, above all, such a scenario is utterly unlikely from the point of view of typology and comparative Finno-Ugric studies. The latter unequivocally indicate that the Vx-es of 1sg (*M) and of 2sg (*T) go back to ancient personal pronouns which are found attached to the end of the verb stem from Proto-Uralic through Proto-Ugric.³³ Thus even if the postulated “suffixless paradigm” had ever existed in Hungarian (unlike in its closest relatives!), it could only have arisen through the disappearance of the original Vx-es in the separated stage of the history of the language. This would mean an agglutinating → isolating change for the verb forms followed by a later stem-final agglutination again to arrive at the present-day forms. This would run completely contrary to the known tendencies of historical typology; fur-

3sg function of *vagy* is not proved by mascot names (as charms they may have been 2sg), and the original 3sg form must have been *vagyon*. (The usual explanation of *van* ‘he is’ as coming from *vannak* ‘they are’ is also problematic: an assimilation **vagynak* > *vannak* is no more plausible—cf. the form *vagytok* ‘you.pl are’ where the sound marked by *gy* did not fully assimilate to a consonant much closer to it in articulatory terms—than a shortening *vagyon* > *van*, in which case *vannak* is the plural of this latter form.)

³³ Cf., among others, Hajdú (1966, 141–4). Csúcs (2001) claims this only of transitive verbs in Proto-Uralic, viz. that the highlighted object was before the verb and this is why the PP indicating the subject (also in 3sg) was moved to a post-verbal position. First of all, the preposing of the object does not automatically entail the postposing of the subject, which would anyhow contravene the almost universal regularity of the subject coming before the object in the basic constituent order. The hypothesis is further weakened by the fact that even in those Uralic languages where there is no objective conjugation, the PP agglutinated to the end, and not to the front, of the verb; the same happened to intransitive verbs in languages with non-person marking object-dependent conjugation; and the same can be said of Indo-European languages. (In fact it has not been convincingly clarified for any of the SOV- or SVO-type nominative languages why the subject-marking Vx-es that go back to PP-s are found at the end, rather than at the front, of verbs. The expected paths of change are shown most clearly by French, but that is a relatively recent development; more on this later.)

thermore, a series like *én vár, te vár* etc., even if agglutinated, should have given rise to a prefixing series (as it happened to French *je, tu* etc., though not indicated in the spelling). On top of all that, the existence of a contrast like *én vár* ↔ *várom* would have made the emergence of the present-day general conjugation superfluous anyhow. And what shall we say about the 1sg suffix *-m*, which turns up in the subjective-general past and in the present forms of the “*ik*-verbs”, mostly intransitive to this day, which is then claimed to have extended to its present positions from a function of marking exclusively definite objects?

6. Thus we have not found a fully satisfactory explanation. While some parts of the hypotheses here surveyed are perhaps dated, the majority of them may nevertheless include points worth considering, even if the hypotheses in their entirety contradict and thus mutually exclude each other. But now let us concentrate on those problems that occur in this whole list of explanations or at least in their majority.

6.1. The explanations that seek to explicate the emergence of the objective conjugation in the third person cannot explain the evolution of the first two persons along the same lines, because in 3sg the marker of the object, whereas in the other two persons the marker of the subject appears in the paradigm.³⁴ Reference to the analogy of an autonomously developing third person form is not convincing either: if in the first two persons the verb forms are supposed to have consisted of three parts originally, the disappearance of the object-marking element, which was the only distinguishing factor between the definite and the indefinite forms in the same person, is inexplicable. If, however, the objective forms in the first two persons consisted originally of two parts, then the Vx3sg, which agreed with the person of the object, cannot have been the pattern on which the Vx1sg and the Vx2sg, marking the subject, were modelled.

6.2. Those hypotheses that explain the development of the objective conjugation in Hungarian with a new development of the reference to definite objects have to countenance the contradiction that this novelty emerged in a form based on the ancient PP-s in the case of the 1sg and 2sg, while in the semantically “unmarked” indefinite conjugation, which should have

³⁴ The depassivisation hypothesis is an exception to this because there it is suggested that the pronominal element in the Sg3 is a subject, but this can only be done, as we pointed out, at the price of regarding the whole verb form passive — an unwarranted conclusion to our mind.

developed earlier than the definite conjugation, more recent elements are seen (at least more recent as Vx-es).

6.3. Reference to an original function of marking an object that is not present in the sentence as the cause behind the development of 3sg forms again gives no answer but begs the question instead why only definite objects could be marked in such a way by a pronoun? Indefinite objects, when not present in a nominal form, should also have been replaced by pronouns.

6.4. Any hypothesis that claims that the indefinite conjugation emerged later than the definite one and thus implies that the current indefinite conjugation appeared as a “counterpoint” to the definite conjugation in order to mark the non-definiteness of the object, must necessarily lead to the conclusion that the current general conjugation came into being through the extension to intransitive verbs of the indefinite conjugation, originally confined to transitive verbs. But this is far not so obvious as it seems. Let us look at the supposed development of the 1sg forms:

(8)	intransitive verb	transitive verb + indefinite object	transitive verb + definite object
initial stage	<i>futom</i>	<i>adom</i>	<i>adom</i>
intermediate stage	<i>futom</i>	<i>adok</i>	<i>adom</i>
final stage	<i>futok</i>	<i>adok</i>	<i>adom</i>

Analogical innovation cannot be conceived of as spreading like an infectious disease. Analogy always means generalisation. To see an analogy between two phenomena—within language as well as elsewhere—consists in seeing their common traits as essential and their differences as unimportant, irrelevant for one’s actual concerns. Deriving the final stage from the intermediate stage in this case would mean that the language gives precedence to the analogy between being accompanied by an indefinite object and lacking an object altogether over the syntactic difference between intransitivity (monovalence) and transitivity (bivalence). Since this analogy clearly cannot be syntactic in nature, it has to be semantically based. But the claim that the semantic aspect of the analogy is the “action not being oriented towards a definite object” is highly spurious (and simply posits the outcome as its own explanation)—yet we know of no other suggestion. If the general conjugation developed in Hungarian as the generalisation of the conjugation of the verbs accompanied by an

indefinite object, this is to be treated not as trivial evidence but as a serious challenge to anyone involved in Hungarian diachronic linguistics.³⁵

7. It is time now to come forward with our own suggestions.

7.1. First of all a distinction has to be made between the appearance of object-oriented (in Hungarian definite) conjugation in the third person and in the first and second persons, since the outcome is different too. In third person singular (and later in the plural) it is clear that the hypothesised pronoun **se* (**se-m?*) referred to a third person object and not to a subject,³⁶ which—as we pointed out several times—is different in principle from the other two persons, where the Vx-es obviously only marked the subject originally. Furthermore, an anaphoric function of this pronoun is only conceivable in the third person, since in the case of first and second person subjects (speaker and addressee) there was neither need nor possibility to refer back to anything.³⁷

Thus it can be safely assumed that the objective 3sg forms go back etymologically to the combination of a verb stem and a 3sg pronoun, and the otherwise important question whether this was a personal or a demonstrative pronoun³⁸ and whether it was represented in its base form

³⁵ It also does not help if we assume that the general conjugation appeared simply in contrast to the transitive conjugation all at once. This is a shortcut to the same problem: while the emergence of the objective conjugation point to the salience of the principle of transitivity, blurring the line between intransitive verbs and transitive verbs with indefinite objects points to the opposite.

³⁶ As we said earlier, Csúcs (2001) argued for the opposite, but is not convincing (see note 33).

³⁷ Given the uncontested etymologies of the Uralic pronouns—as well as of the large part of Px-es and Vx-es—it would be futile to assume a stage at which a Sg1 subject would speak of himself or of the addressee in the third person. The use of full nominal elements as subjects was thus only possible when a real third person was involved, and so it was only in these cases that pronouns had anything to replace. But, as we have seen, even then this did not happen, since the pronoun refers to the object and not the subject.

³⁸ In Hungarian and in the Finno-Ugric languages generally it was clearly a personal pronoun, but in other languages it may well have been a demonstrative pronoun. Actually, in 3sg the two categories may just as well have been indistinguishable (in as much as the same pronouns were used for objects and persons, as it still is the case, at least in part, in Hungarian, especially in 3pl: *Megkaptad a könyveket? Meg, de még nem olvastam őket*. 'Have you got the books? Yes, but I haven't read them yet'; the form *azokat* 'those' instead of *őket*, currently promulgated by purists, is not archaic).

or in the accusative³⁹ after the verb is irrelevant from this point of view. The essential point is that in these forms the pronoun appears behind the verb in order to mark the object.⁴⁰ The question is to what period we can date this development. As is well known, the 3sg distinction between an unsuffixed non-object-oriented and a person-marked object-oriented form can be plainly demonstrated for Hungarian, Vogul, Ostyak, Mordvin, Nenets, Enets and Nganasan.⁴¹ This could theoretically point to these particular forms going back to Proto-Uralic. On the other hand, the same distinction is unknown in the rest of the Uralic languages, which either renders the dating to Proto-Uralic impossible, or leads to the assumption that these languages also possessed the original Proto-Uralic contrast but got rid of it with the passage of time. There is, however, no evidence whatever to support the latter hypothesis.

We think the contradiction can be circumvented only if we give up the assumption that this pronoun was already agglutinated in the proto-language and instead of an objective verb form we hypothesise an objectively constructed verbal phrase. What this means is that when the nominal element functioning as the object was not present in the immediate environment of the verb, a pronoun referring to a third person object appeared there. This "absence" of the object is usually interpreted in such a way that the pronoun fulfils an anaphoric role: it replaces an already mentioned nominal object. While this is possible, we think that, of the three possible spheres of use (deictic, anaphoric, cataphoric), anaphoric is the youngest. Given that communication did not happen in carefully constructed and worded discourse and especially not in texts detached from the relevant situation (and thus fixed, and interpreted only later), but the exchange of information took place in a living speech community in the concrete actuality of a variety of situations, deixis (i.e., reference outside the discourse, to the speech situation) may very well have been more frequent than anaphors. Yet we would put cata-

³⁹ At this point let us only note that even if this accusative ending could be demonstrated for the Uralic languages, other languages showing object-dependent conjugation prove that this is not a prerequisite of the emergence of the 3sg objective form.

⁴⁰ Previously it was also thought that in 3sg there were two possible endings (\emptyset and $-? < PP$), with objective reference being added only later (Mészöly 1931, 65ff; Berrár 1957, 54). This clearly contradicts what we know of the Finno-Ugric languages that have objective conjugation, and it also leaves the phenomenon unexplained.

⁴¹ Hajdú (1966, 75, 1985, 245); Rédei (1989, 185), etc.

phor (forward reference) first. This is because pronouns constitute — despite their traditional name — a more ancient and by nature more general (not more generalised but more undifferentiated) syntactic category than nouns. Even today they are not only used to refer to what is already known but also to syntactically represent items that are only hypothetical in terms of some possibility or generality, and not more specific than that. What we find most likely is that speakers indicated the object associated with a transitive verb with a pronoun, and then explicated it with a postposed, additional nominal element (noun).⁴² This structure must have alternated with the immediate presence of the object, i.e., **kanta se(m)*, *kala(m)* and **kanta kala(m)* could both be used to mean ‘he brings the fish’. In those languages where the latter — in a certain sense progressive — entirely replaced the pronominal structure, object-dependent conjugation never developed and thus never existed.⁴³ In those languages where the former syntagmatic structure — in our view more primitive in a sense — stabilised, after a syntactic reanalysis and a stress shift there emerged the possibility for the pronoun to agglutinate, whereby a verb form with object-oriented suffixation came into being. The objective conjugation thus developed in some of the daughter languages from the same ancestral syntactic structure, materially the same 3sg pronoun and via a process that is in broad outlines the same and yet we need not assume that the eventual agglutination took place in the proto-language. In other words, the third person objective verb form in the Uralic family has its motivation, though not its etymological origin, in Proto-Uralic. We suggest that the same can be said with respect to object-dependent conjugation as an organising principle. This hypothesis, viz. that what we see here is the independent actualisation in the daughter languages of a potentiality that goes back in etymological as well as syntactic terms to the proto-language, helps to circumvent the — mostly implicit — problem, too, of how the objective conjugations of the affected languages can be so different if they go back to Proto-Uralic.

⁴² Such structures have been gaining currency in Romance languages recently: *je la vois, la tour Eiffel*, etc. In Hungarian the congruence of demonstrative pronouns is a development parallel to this: **látom azt, a házat* ‘I see that, the house’ → *látom azt a házat* ‘I see that house’; **abból, a kosárból vette ki* ‘he took it from that, the basket’ → *abból a kosárból vette ki* ‘he took it from that basket’, etc.

⁴³ For some of the Finno-Ugric languages (Permic, perhaps Cheremis) it is assumed that a development along these lines began but terminated at some point. These cases, however, represent internal developments and not the disappearance of something inherited from the proto-language.

Going back to Hungarian then, it seems clear that the emergence of the 3sg objective verb form followed a simple path: a PP3sg was agglutinated to an originally unsuffixed verb stem.⁴⁴ But it is also clear that this should have resulted in a semantically extensive transitive conjugation (i.e., it does not yet explain why this verb form only refers to definite object), in other words what has been said above does not fully account for the present state of affairs even in 3sg. Nevertheless, if this is a hypothesis along the right lines, there must have been a period in the history of Hungarian after its separation from the rest of the family when the objective conjugation already existed in the third person but not yet in the other two. The relevance of this should not be overestimated even though it follows clearly that sentences were organised on different principles in the case of the third person than in the first and second persons. The objective-subjective distinction in the third person — which, being extensive, was not identical to its modern reflex, also attested in the other two persons —, could serve only as a background, as a functional, but not structural, starting point for the latter.⁴⁵ This is because the scheme of syntagmatisation is inapplicable to the first and second persons (such a process should have led to entirely different results). The 1sg and 2sg objective forms must be explained along different lines.

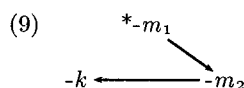
7.2. Let us now turn to the problem of the first and second persons.

7.2.1. As we have seen, all the hypotheses that — while accepting the ancestral status of the *-m*, *-d* suffixes — hold that the emergence of the objective interpretation of these endings in 1sg and 2sg, respectively, diachronically and/or logically preceded the other endings (now called indefinite or general), take it for granted that the non-object-oriented conjugation is the negation of the object-oriented conjugation in its origin

⁴⁴ As far as we can judge there is no evidence of an ancestral accusative suffix on the pronoun in Hungarian; if it had ever been there it must have been apocopated before the emergence of the 3pl suffix (= 3sg + *-k*, the latter being the plural suffix), let alone the other two plural forms.

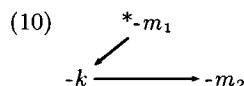
⁴⁵ And was by no means dominant, given that it only encompassed one third of the verb forms. In present-day Hungarian not only third person but also second-person objects may trigger objective conjugation (*-lak/-lek*), i.e., the object-dependent system now encompasses more than half of the possible subject-object combinations (1-3, 2-3, 3-3, 1-2), but there are no signs of its extension to the rest of the combination (2-1, 3-1, 3-2, which still trigger the general conjugation). This makes it futile to meditate on the extension of third person object-dependent conjugation as a basic motivation for change.

and essence. The logic of the diachronic process in these hypotheses can be represented on the lsg as follows:



That is, the original, only and thus undifferentiated Vx ($*-m_1$) first assumed the function of referring to definite object ($-m_2$), then in order to complement this there appeared the Vx here represented by $-k$, which thus first indicated reference to indefinite object, then to no object at all. We discussed the problems of this conception in 6.4.

7.2.2. The hypothesis that we shall put forward now is, in a certain sense, the exact opposite of the one above. Namely:



That is, we claim, that the original function represented in the chart by $-k$, did not emerge in relation to the objective ending but in relation to the original, undifferentiated Vx; in other words, that is what it came to stand in contrast to, and the originally only suffix ($*-m_1$) was reanalysed as a suffix indicating definite object ($-m_2$) only in relation to this other suffix (as non- k).

Our claim that $-k$ differentiated vis-à-vis $*-m_1$ involves the assumption that this process originally had nothing to do with the presence vs. absence of an object, and even the transitive or intransitive nature of the verb was irrelevant. Actually we are convinced that the suffix $-k$ appeared among intransitive verbs — to formally express the semantic content of **mediality** in the process of the emergence of a separate verbal paradigm type.

7.2.3. Let us then explain what we mean by mediality. The term middle voice is traditionally used in relation to actions (more precisely: events, or even states described by verbs) where the event described by the verb does not transcend the semantic limits of the grammatical subject, i.e., where the subject acts or behaves not with a goal outside itself but for, on, with, in relation to etc. itself (whether actually or habitually), or something happens to the subject, it enters a state without this being the result of some action on anyone else's part. In terms of mediality in

the broadest sense it is immaterial whether the subject is semantically agent or patient. The middle verbs *ugrik* 'jump', *fut* 'run', *fordul* 'turn (intr)', *mosakodik* 'wash oneself' have subjects that are agents acting at will, but the similarly middle verbs *szédül* 'feel dizzy', *elájul* 'faint', *él* 'live', *van* 'is' have subjects that are patients, affected by the event. Inanimate entities are always patients (*forr* 'boil', *lebeg* 'float', *fénylik* 'shine' etc.). Verbs denoting involuntary actions and states can be interpreted as standing between agent and patient: *köhög* 'cough', *fázik* 'feel/be cold', *fél* 'be frightened', *örül* 'be happy' etc., though we think their subject can be regarded rather as patient in spite of the fact that the subject is acting. Similar boundary cases are represented by verbs denoting habitual actions (which thus turn into properties), occupations; this class includes verbs generalised from transitives as well (*házal* 'sell door-to-door', *vadászik* 'hunt', *fordít* 'translate' in the sense of translating for a living). All these are middle verbs/verb forms. The examples will have made it clear that we also assign verbs here whose subject acts at will and on a goal but the goal is identical to the subject (*öltözködik* 'dress oneself'). The same stands for events affecting inanimate entities as subjects, where of course one cannot speak of the activity of the subject (*ömlik* 'pour (intr)', *becsukódik* 'shut (intr)'). By contrast, real passive verb forms (*öntetik* 'is poured', *becsukatik* 'is closed') cannot be regarded as middle in spite of the patient subject, because the events that happen to the grammatical subject have a semantically clearly distinct "subject", in other words: the agent of the event and the grammatical subject are sharply differentiated. It must, however, be borne in mind that not only intransitive verbs can be middle; but more on this will be said later.

The representation of mediality is a motivating force that often appears to be at work in the nominative languages.⁴⁶ It is enough to think of the variety of functions assumed in Romance by the Latin reflexive

⁴⁶ I have argued elsewhere (Havas 2003, 33ff) that this ultimately goes back to an ancestral principle, which is preserved in an altered form in nominative structures. The essence of this principle is that when the earlier organising principle of sentence structure, the agent–patient distinction is replaced by transitivity, and the nominative subject appears to function as a prototypical agent, those subjects that are patients, contrary to the new majority pattern, come to be marked through medialisation. (Of course we do not assume any kind of teleology — languages have neither nostalgia, nor goals, language change only has causes —, what happens in such cases is the analogical extension of existing middle verb forms.) Acceptance of this hypothesis is independent of the argument in the present paper.

pronoun. The outcomes should, in theory, be reflexive verb forms, but the semantic range is, in fact, much larger. French, for instance, abounds in verbs accompanied by the particle *se* whose meanings cannot be interpreted as actually reflexive in spite of the corresponding transitive forms without the pronoun: *se fâcher* 'be/get angry' (not 'anger oneself'), *s'endormir* 'fall asleep' (not 'lull oneself to sleep'), *se battre* 'fight' (not 'beat oneself') etc., in some cases the form without *se* has (nearly or actually) gone out of use, as in *s'efforcer* 'to make efforts'; and what sort of reflexivity is represented by *la tour Eiffel se voit de loin* 'the Eiffel Tower can be seen from afar'? This phenomenon is, of course, much older, the reflex of the same pronoun has led to very similar outcome in all the Germanic and Slavonic languages (German *sich freuen*, Russian *радоваться* 'be happy' and their counterparts), but examples could be given from nearly any of the Indo-European languages. Nevertheless it would be an erroneous conclusion that this is an ancestral inheritance: this development happened again and again in the individual languages, which is evidenced by the fact that while in Romance and Germanic the "reflexive" particle behaves like a personal pronoun — i.e., it distinguishes person and number, partly coinciding with the accusative of the corresponding personal pronouns: *je me fâche*, *tu te fâches*... , *ich freue mich*, *du freust dich*...; but witness *il se fâche* (and not *le*), *er freut sich* (and not *ihn*) —, in the Slavonic languages, on the other hand, the item in question (e.g., Russian *-ся*) extended to all persons. If all these forms are to be interpreted in a semantically unitary fashion (and this is how they were interpreted in the language when they assumed a coherent form), the general meaning has to be that the action is semantically middle.

In Hungarian this tendency is discernible especially in the history of the *ik*-verbs. Wherever the *-ik* suffix comes from, it has always behaved as a middle derivational morpheme.⁴⁷ In suffix clusters its mean-

⁴⁷ Here we only note, though it would deserve a study on its own, that we find the derivation of *-ik* from the 3pl ending of the objective conjugation, which has become the orthodoxy in Hungarian historical grammar with Mészöly (1941), totally unacceptable. But supposing that it was true, even the textbook example *török* 'break' is not passive in meaning, as such a reanalysis would imply (namely if its subject had been an original object), but middle instead: 'breaking is happening to it; it comes (by itself) to a state of being broken' (let us think of the actual meaning of the sentence *az ág letört* 'the bough broke'). If the sentence *az ágat török* 'they break the bough' can be passivised at all in Hungarian, the result is not *az ág török* 'the bough breaks' but *az ág töretik* 'the bough is (being) broken'. Let us note again that *török* 'breaks (intr)' is not a passive but a middle

ing can, of course, narrow down to something more particular: *-kodik* is mostly reflexive, but often refers to habitual behaviour or occupation, *-odik* refers to entering a state, *-sodik* to the acquisition of a characteristic as a result of an event, *-ászik* to action carried out habitually or as an occupation etc., but the element *-ik* is still the exponent of the semantic feature of mediality. In the pristine *ik*-verbs its middle meaning is obvious: *bújik* 'hide', *mászik* 'crawl', *ugrik* 'jump', *nyúlik* 'stretch' etc. (doing something to oneself), *alszik* 'sleep', *csuklik* 'hiccup', *ellik* 'give birth', *okádik* 'vomits' etc. (doing something involuntarily, or rather undergoing it), *fürdik* 'bath', *mosdik* 'wash oneself', *öltözik* 'dress oneself' (transitive action directed towards oneself), *ázik* 'soak', *kopik* 'thin', *esik* 'fall', *válik* 'separate' (apparent action is actually undergone), *illik* 'is proper', *kéklik* 'is blue', *hallik* 'is heard', *folyik* 'flow' etc. (in fact, not an action but a characteristic), *eszik* 'eat', *iszik* 'drink', *játszik* 'play' etc. (originally occupying oneself with doing something). For most of these verbs it seems plausible to assume that the suffix *-ik* agglutinated in itself to a relative stem (in other cases it may have attached to the verb analogically in suffix clusters, but the original cases, which served as the basis of analogy, obviously acquired suffix clusters only later and may even have had endings that could become autonomous, i.e., the addition of *-ik* can be regarded in principle as a separate issue). Some of these verbs are not only assumed but also attested by documents to have been non-*ik*-verbs: *foly* 'flow', *hazud* 'lie', *esz* 'eat'.⁴⁸ The hundreds of modern Hungarian

verb form and we are convinced that it never was otherwise. Let us also note in passing that the ordinal suffix *-ik* (*második* 'second' etc.) is of unknown origin, but it is clear that — unless its similarity to the verbal suffix *-ik* is an accident — it clearly cannot be derived from a verbal (actually, objective) suffix; though an original suffix *-ik*, functioning as a "self-identifying" derivational suffix on nouns as well as verbs is not out of question. (In Uralic linguistics the idea has been around that the verbal suffix *-ik* goes back to the combination of the pronoun **si* and an emphatic suffix *-kk*. If this is correct, the ordinal suffix cannot be related to it, or at most its consonant can.)

⁴⁸ The medialisising function of *-ik* in *eszik* is clearly indicated by the fact that when the verb is used transitively but with a non-third-person object, it does not have the *-ik*: *esz a fene* 'I am annoyed', lit. 'disease is eating me', *megesz a sárga irigység* 'I am yellow with envy', lit. 'yellow envy is eating me'. What this means is that in 3sg the general vs. definite contrast was carried by the pair of forms *esz* – *eszi*, and *eszik* did not come into being in contrast to *eszi* but to *esz*, as a middle verb form with the original meaning 'is occupied with eating'. We are convinced that first it was not transitive (just like *játszik* 'play'), although intransitivity is not a prerequisite to mediality. The sentence *kenyeret eszik* 'he is eating bread' is now a transitive phrase, but originally it was only a specification of the verb

ik-verbs that refer to actions involving the use of instruments of sport, music, or indeed any kind of instrument have been created mostly over the past one or one and a half centuries (*szánkóz* 'slide with sleigh', *zongoráz* 'play the piano', *dohányoz* 'smoke cigar(ette)s' were in general use even in the early twentieth century). Some forms fluctuate to this day (*vész* – *veszik* 'is lost'). Some verbs are "hypermedialised" in the current colloquial language (*látszódik* 'is seen'). All these point — as typical examples — to a strong and still productive tendency of medialisation in Hungarian.

7.2.4. We thus assume that the conjugation called general ("subjective") — and we are still talking about the first two persons —, emerged to represent the mediality of the action, event or state denoted by the verb in contrast to the ancestral, undifferentiated *Vx*-series.⁴⁹ The history of verbal derivation shows that a number of the suffixes that originally attached to the pure verb stem carried the meaning of mediality besides a more specific meaning (frequentative, inchoative, durative etc.). With the suffixes that now function as *Vx2sg* (*-l*, *-sz*) this is obviously the case: *tanul* 'learn', *ugrál* 'jump around', *rikácsol* 'screech', *vádol* 'accuse', *énekel* 'sing' — the traditional explanation assigns to these the labels frequentative, reflexive or momentary, but the common core of these meanings is precisely mediality; and the suffix *-sz* is not only identical to that found in *lesz* 'become', *tesz* 'put', *visz* 'carry', identified sometimes as present, sometimes as frequentative, but, in all likelihood, also to the *sz* in *-ász/-ész*.⁵⁰ This last suffix is a denominal verbal suffix denoting an activity or occupation related to the noun in the stem, i.e., a typically middle meaning.⁵¹ The 1sg suffix *-k* is more of a problem; it is tradi-

eszik, still middle, and it answered the question 'what is he doing' rather than 'what is he doing with the bread?'.

⁴⁹ The possibility of such a development is underscored among others by some languages in the Balto-Finnic branch of the Uralic family, e.g., Veps, in which there is a contrast between a general and a reflexive-medial conjugation, as well as the history of the Indo-European languages (in Greek, for instance, it is clear that the passive voice, which has an incomplete paradigm, grew out of the middle voice; the original contrast was thus general vs. middle).

⁵⁰ The long vowel obviously goes back to the stem-final vowel or a further derivational suffix, which coagulated with the stem, thus the *-sz* is diachronically separate.

⁵¹ In 3sg the semantic feature of mediality was later reinforced through the addition of the suffix *-ik*, which completed the process of turning these forms into verbs (*halászik* 'he fishes'); the form without *-ik* lost its nomen-verbum character and

tionally identified — in want of a better explanation — with a deverbal nominal suffix (*rejte* ‘hiding place’, *hajlok* ~ *hajlék* ‘dwelling place’),⁵² but this is a rather laboured solution given that a 1sg verb form can hardly derive from a nominal function.⁵³ The idea that the form may go back to an endearing, diminutive formation applied by the speaker to himself⁵⁴ — apart from doubts of a different nature — does not answer the question why this formative only occurs in this conjugation. We assume, in contrast to all previous explanations, that *-k* was originally a medial suffix.⁵⁵

No matter how we explain the origin of the suffixes *-k*, *-sz*, *-l*, *-ik*, it still remains a problem why they turned into Vx-es in just those persons in which they did, since nothing predisposed them to it. We have no explanation ourselves; at any rate, we do not have an account that would be superior to those unconvincing ones proposed before us. Anyhow, these endings pose three questions that need answering: what they derive from, why they attached to the verb and why they denote the specific persons they denote. The first and last of these is clearly language-specific. Typologically, however, it is the second question that proves most interesting, since this is where cross-linguistic tendencies can be uncovered. If we see that an object-dependent conjugation came into being in several

was fixed as a noun (*halász* ‘fisher’). Similar “oversuffixation” may have taken place with *alszik* ‘sleep’, *fekszik* ‘lie’, *nyugszik* ‘rest’, where again the middle meaning of the *sz* is discernible.

⁵² E.g., Berrár (1967, 418).

⁵³ Rédei derives all the three Vx-es from participial suffixes. This is certainly a more plausible solution than the assumption that they were nominal suffixes. In the latter case the finite verb would go back to a nominal predicate, but this would necessarily involve the assumption — with an eye to the differentiation from the ancient Vx-es, which derive from pronouns — that for some reason after a long period of distinct verbal predicates they started using nominal sentences instead. The same problem does not arise with participles, since they undeniably share the verbal nature, and a sentence with a participial predicate can be taken as a verbal as well as a nominal sentence. (This is exactly why certain participial predicate forms are incorporated into the conjugation system.) Furthermore, a participial suffix can be semantically middle, e.g., attributing a typical feature or a habitual occupation to the subject (*elsőszülött* ‘first-born’, *halandó* ‘mortal’, *író* ‘writer’, *jegyző* ‘notary’).

⁵⁴ Nyíri (1974, 144), based on others; the hypothesis rests on the analogy of Vogel.

⁵⁵ Since we completely refuse the derivation of *-ik* from 3pl and assume that *-ik* is originally also a medial suffix, we venture to claim (though it may be far-fetched) that 1sg *-k* and 3sg *-ik* may be etymologically related.

languages, and that in some of them the non-object-oriented conjugation developed in a fashion similar to that seen in Hungarian, then it would be erroneous to try and seek individual and particular explanations for each of them, including Hungarian. It is much more likely that the driving force behind the process is a general diachronic tendency of medialisation.

Given all this, we suggest the following modification in the scheme of development presented as (8) in 6.4 (and then questioned):

(11)	intransitive verb	transitive verb + indefinite object	transitive verb + definite object
initial stage	<i>futom</i>	<i>adom</i>	<i>adom</i>
intermediate stage	<i>futok</i>	<i>adom</i>	<i>adom</i>
final stage	<i>futok</i>	<i>adok</i>	<i>adom</i>

That is, we assume that in the intermediate stage an (intransitive) middle conjugation appeared, which was at that time crucially contrasted to a non-middle conjugation, although the above chart implies that the opposite was not non-mediality but transitivity. But if the opposition had been based on transitivity, that should have led to extensive object-dependence, which is contradicted by the eventual outcome.

The spreading of the middle conjugation to transitive verbs — i.e., the formation of what we now call the indefinite conjugation of transitive verbs — can be understood if we appreciate that certain types of the use of transitive verbs were not defined by their transitivity in the first place but by the mediality of their meanings. The essential semantic difference between *a ló megeszi a zabot* ‘the horse eats the oats’ and *a ló zabot eszik* ‘the horse eats oats’ is not in the definiteness or indefiniteness of the object but in the semantic intention that prompts the selection of one or the other. While the structure with the definite object tells what the horse is doing to the oats, the sentence with the indefinitely conjugated verb is a statement purely about the horse, and in ordinary use it would not answer the question what the horse is doing here and now but what it usually and typically does. (In its most natural use the sentence *a ló zabot eszik* is equivalent in meaning to ‘horses are oat-eating animals’).⁵⁶ But even in its “here-and-now” interpretation the sentence is not a statement about oats but an explication of the middle meaning ‘the

⁵⁶ This is especially clear in the negative: *a ló nem eszik húst* ‘the horse does not eat meat’, i.e., ‘horses do not eat meat’ is obviously not a statement about what a horse is doing to the meat but answers the question what sort of an animal a horse is just like e.g., the sentence *horses are mammals*.

horse is eating': 'the horse is busy eating oats, is occupied with eating oats'. From the point of view of semantic intentions what is syntactically the object of the verb is more of an adverb of circumstance: *gyorsan eszik* 'he eats fast' and *kenyeret eszik* 'he eats bread' are closer to each other than the latter is to *eszi a kenyeret* 'he is eating the bread'. It is precisely these forms with syntactic object but with middle meaning that bridge the gap between intransitive middle verbs and transitive verbs with indefinite object; so much so that it would probably make more sense to talk about the simultaneous emergence of intransitive middle forms and middle forms of transitive verbs with indefinite object rather than the spread of the former onto the latter.⁵⁷

Thus what is now called indefinite or general conjugation was a middle conjugation in the beginning. Later the original middle formation analogically spread to those cases where the content to be expressed was not actually middle but the object of the verb was not salient. Such analogical spread could easily take place between structures like *kenyeret sütök* 'I bake bread' and *jó kenyeret sütök* 'I bake good bread' or *öt kenyeret sütök* 'I bake five loaves' since the respective adjectival and numeral attribute may have seemed more of an explication of the original event—even though it is only the first of these sentences that is middle, i.e., which answers the question what the subject is in the process or habit of doing.⁵⁸ On the other hand, this analogical extension was obviously facilitated by the possibility of a double interpretation of the forms with ancestral Vx-es, more precisely by an analogical reanalysis in that paradigm as well. This is because a verb form accompanied by a definite object is by its very nature non-middle and from here it is only a small (though logically unjustified) step to reverse the equation: non-middle forms are characterised primarily by having definite objects. Thus in the case of transitive verbs the middle vs. non-middle bifurcation was reanalysed as an indefinite object vs. definite object bifurcation. So the emergence of the non-middle indefinite-object conjugation and through this the emergence of the current general conjugation on the one hand,

⁵⁷ It is unlikely that there would have been a time when *eszik* 'he eats' or *gyorsan eszik* 'he eats fast' had the *-ik* suffix but the indefinite transitive forms lacked it, e.g., *kenyeret esz* 'he eats bread'. It seems more likely that the *-ik* appeared simultaneously and for the same reason on the form that contrasted with *eszi*, viz. to reinforce its middle meaning.

⁵⁸ It is well to point out here that the sentence *jó kenyeret sütök* 'I bake good bread' still has a reading that can be regarded as middle, viz. 'I am a good baker'.

and the reinterpretation of the conjugation with the ancestral Vx-es as a conjugation used with definite objects on the other, were two parallel developments, whose chief cause was on the one side the encroachment of the middle conjugation onto a semantically non-middle domain — when the object was used as an adverb of circumstance —, on the other side the secondary cause (partly acting in tandem with the former) was that the feature of non-mediality lost ground to that of definiteness.

7.3. Let us now briefly return to the developments in the third person, which we have been able to trace back on its own right as far as a putatively extensive, i.e., intransitive vs. transitive, contrast. We noted previously that the distinction in 3sg, which appeared much earlier, had the possibility of serving as the functional background for the bifurcation of the suffixation in the first two persons. But here eventually we have to assume a cause-and-effect relation working in the opposite direction. Since intensive object-dependence, the contrast between a general and a definite conjugation, diachronically presupposes the feature of medality, it must have appeared initially in the first two persons (we can leave *ik*-verbs out of consideration, because *-ik* as a personal ending was not generalised for the third person). Thus in the third person the last step (replacing extensive with intensive object-dependence) was taken, in all likelihood, on the analogy of the development of such a contrast in the first and second persons, when this latter had been completed. The completely generalised intensive object-dependent conjugation system of Modern Hungarian, i.e., the contrast between verbs accompanied by a definite object vs. everything else, ultimately results from this two-pronged interference.⁵⁹

7.4. With respect to its history and semantic content we can say with certainty that the motivation and the driving force for the emergence of the Hungarian objective (definite) conjugation are in fact to be found — at least in the first two persons — on the other side, in the process of the formation of the indefinite conjugation. To put it bluntly (though

⁵⁹ It has long been observed that in the early documents of Hungarian the distinction between the two types of conjugation is not made along exactly the same lines as in Modern Hungarian (see e.g., Gergely 2001). This can perhaps be interpreted not as a sort of rule-infringement or gratuitous commingling of forms but as an earlier stage of the generalisation of the middle conjugation, or a vacillation of the object-dependent conjugation between an earlier (middle vs. non-middle) and a later (general vs. definite transitive) principle of contrast.

loosely): it is not the objective but the subjective conjugation that actually emerged. What is now called general conjugation separated from the homogeneous ancestral conjugation and gradually assumed a form of its own; the original conjugation, which remained “unchanged”, was reinterpreted as a definite transitive conjugation because of, and in contrast to, the other.

7.4.1. An obvious objection that could be made at this point is that our hypothesis only applies to the singular, because in the plural the pattern is just the opposite: the indefinite conjugation preserved the original Vx-es and they are not found in the definite conjugation. We find this widespread opinion erroneous. First of all it only applies to 1pl; in the third person neither the definite, nor the indefinite forms contain the ancient subject-marking Vx (*látⁿak*⁶⁰ ‘they see’, *lát^ják* ‘they see it’), whereas in the second person both forms contain it (*lát^tok* ‘you see’, *lát^játok* ‘you see it’). Anyhow, in all the three persons of the plural the developments are internal to Hungarian in that their (innovative?) immediate stem is the 3sg form of the definite paradigm (**lát^já*-).⁶¹ This is due to the fact that, as we have already said, the Vx of the third person — as opposed to that of the first two persons — is an element that marks the object and it was in that capacity that it analogically intruded on the first two persons. So the 3pl form is simply a plural-marked 3sg, and the objective 2pl is a subjective form of the same person plus a formative referring to the object (here *-já-* is actually an objective infix).⁶² We are left with the 1pl form, where the formative *-*m* only remains now in the indefinite conjugation (*-unk* vs. *-juk*, where *-unk* < stem-final *u* + *m*• + *k*). The *-j-* found in the objective form is clearly the same as that of 3sg (and the infix of 2pl and 3pl), at most with the loss of a vowel (if there ever was

⁶⁰ The *-n-* in *-nak* can be diachronically analysed as a third person subject-marking element, but it is not an ancient Vx (it does not go back to a PP); otherwise *-nak* mostly contrasts even today with a 3sg zero morpheme, so *-n-* cannot be descriptively analysed as a separate entity (in other words, *-nak* is synchronically unanalysable).

⁶¹ Similar developments are seen in the case of the Px-es: *kalap^jjaink*, *kalap^jjaitok*, *kalap^jjaik* ‘our/your/their hats’ on the analogy of *kalap^jja* ‘his hat’ instead of *kalapⁱink*, *kalapⁱitok*, *kalapⁱik*.

⁶² We are left in the dark as regards whether there existed other ancient plural forms before the intrusion of the *-já-* element in the undifferentiated > objective conjugation (were there ancient plural forms at all?), thus the medialisation hypothesis is neither confirmed nor disconfirmed by these formations.

one) before the *-u-*; this latter can only have appeared in this form on the analogy of the general suffix *-unk*. Given all this one would expect, parallel to the 2pl, a *látu-mu-k* ↔ **lát-j-unk* contrast in 1pl. And indeed it seems logical that the Pre-Hungarian stage should have included the forms **látu-mu-k* ↔ *látu-ju-mu-k*.⁶³ First, in the definite form the presence of the *-j-* open syllable made it possible for the preceding (stem-final) vowel to syncopate. Secondly, and more importantly, when in the indefinite form the vowel before the plural marker was dropped (**látu-mu-k* > **látu-m-k* > *látu-n-k*), the definite form with its two *u*-s, which were independent of the stem and thus felt to belong to the ending, and especially with the position of the second before the plural marker, was by then so removed from the indefinite that at least one of its syllables could be freely dropped. It must be added that the form with *u* only characterised the 1pl, thus ultimately it may have been interpreted as the exponent of the first person. Naturally the same stands for the palatal 1pl formations. All this then led to the syncopation of the newly redundant syllable *-mu-/mü-*, and this is how the current forms *látjuk/vetjük* (*lattyuk/vettyük*) ‘we see it/we cast it’ came into being.⁶⁴ In sum, the cross-classifying distribution of the ancestral Vx-es in the singular and the plural is only an illusion and, on top of all that, since the plural forms are diachronically based on the hypersuffixation of an earlier 3sg form with a definite objective meaning, they have nothing to tell us about the **original** formation of the two conjugations.

7.4.2. If we look at the current coincidences between the definite and the general conjugations, what we see is that it is always the original, not the innovative, suffix that turns up unexpectedly. Thus the diachronic question that we must ask is obviously why the change, i.e., the medialisation did not take place in the given formation.

7.4.2.1. There are obvious cases, like the past indefinite 1sg (*kértem* ‘I asked’, *vártam* ‘I waited’, where the expected alternation between *m* ~

⁶³ The vowel following the *-j-* may have assimilated to *u* under the influence of the two adjacent syllables even if it was originally different.

⁶⁴ Consideration of the other moods and tenses does not add anything to this conception of the changes. In the case of *látánk* ‘we saw’ and *látnánk* ‘we would see’ the two conjugations are not distinguished, in the case of *látnók* (<**látno-uk*?) ‘we would see it’, *lábbuk* ‘we saw it’ and *lássuk* ‘let us see it’ the analogy of the declarative may have been at work (or, in the imperative, the same process may have taken place as in the declarative present objective form — but clearly earlier because the assimilation of the *-j-* is older there).

k would have led to homophony with the 3pl form of the same paradigm (*kértek* 'they asked', *vártak* 'they waited').⁶⁵

7.4.2.2. The pristine *ik*-verbs present a more difficult case. The "unwarranted" appearance of *-m* in the indefinite conjugation is conspicuous even to non-specialist native speakers. Furthermore, no immediately convincing syntactic or morphological reason is found here. Nevertheless, we believe that the medialisation hypothesis does offer a sort of explanation: the pristine *ik*-verbs were so conspicuously middle semantically that stressing this through resuffixation proved unnecessary. We are aware, of course, that this explanation, which draws on the original and persevering presence of the middle meaning in 1sg but the need to stress the same meaning in the other two persons (since that is how we explained the replacement of the ancestral *Vx-es*) is not without problems. Not even if we add that semantically the first person singular is the most "self-identical" ("most middle") subject, and against *-k* there was the menacing possibility of a partial coincidence with the 3sg *-ik* ending (though this did not seem to prevent the later intrusion of *-k* into the paradigm). We cannot say more about this at present, and, to the best of our knowledge, nobody else can. Let us conclude that what we see in the 1sg is not the "objective" conjugation of the *ik*-verbs but a defect in the formation of the middle conjugation. The *-m* among the *ik*-verbs is the perseverance of the original, undifferentiated *Vx*, whereas the objective *-m* is the later grammaticalisation of the same ancestral *Vx*.⁶⁶

7.5. Finally—if we wish to give a full account of the object-oriented conjugation in Hungarian—we have to discuss the formation of *-lak/-lek*. Materially the *-k* in it presents no problem: it is the same as the general

⁶⁵ The homophonic clash between 1sg and 3pl in *nézék* 'I saw/they saw it' and *néznék* 'I would see/they would see it' is not within the same paradigm, thus cannot lead to confusion in particular utterances (the problem does not even arise with *láték* 'I saw' and *látnék* 'I would see', though it is possible that the appearance of the palatal vowel in the suffix is related to the tendency to differentiate from the definite *PI3* form); the same stands for the older and the innovative inflected forms of the *ik*-verbs: the 1sg vs. 3sg interpretations of *ennék* 'I/he would eat' belong to two different paradigms (*enném, ennél, ennék* vs. *ennék, ennél, enne*).

⁶⁶ Let us note here that the current forms *játszok* 'I play', *eszek* 'I eat', *alszok* 'I sleep' are not medialisations but result from the simple formal analogy with the non-*ik*-verbs. In this way the possibility to distinguish between the two conjugations emerges here as well (*kenyeret eszek* 'I eat bread' vs. *megeszem a kenyeret* 'I eat the bread'), but this is clearly a consequence and not a motivation.

1sg ending. As for the *-l-*, there are two possible explanations. One is that it is etymologically identical to the 2sg *-l-*. If it indeed is, it has to be an object-marking element, and it is coherent with the overall pattern that it precedes the subject-marking element (this is what we see in the plural of the objective conjugation). But this explanation faces two serious obstacles. One is that the stages of agglutination — namely the first, when there was only an *-l-* — are very difficult to argue for (some hold that there never was a **kérel* form as the antecedent of **kérelek* > *kérlek* ‘I ask you’). The other is that the *-l-* should be regarded as an object-marker, which is unparalleled (since it always marks the subject in the middle-intransitive series). The other attempt⁶⁷ at an explanation assumes that the *-l-* is a transitivising suffix, the variants *kérek* and **kérelek* may have existed side by side but both belonged to the general conjugation, and only a bifurcation of their contexts (*kérek valamit* ‘I ask (for) something’ vs. **kérelek téged/titeket* ‘I ask you’) led to the current transitive, second-person-oriented meaning of the *-lak/-lek* suffix. The problem with this explanation is that there is no evidence whatsoever for such a bifurcation of contexts (all the more so in view of the fact that there is no trace of anything similar in the case 1pl subject: *kérünk* — and not **kérünk* — *téged/titeket* ‘we ask you’), and thus the explanation really presupposes what it tries to account for. The medialisation hypothesis is of no use at this point either, because the object cannot be regarded as indefinite, let alone irrelevant, as a mere adverb of circumstance. The origin of *-lak/-lek* is still not a settled question (especially with respect to the why, rather than the what or the how).

8. Summarily we can say the following about the development of object-dependent conjugation in Hungarian.

8.1. The current system, typified by a contrast between a general and a definite conjugation, was first formed in the singular, goes back ultimately to two different sources, and developed along two logically different paths.

8.1.1. In the third person, the verb was originally unsuffixed both in transitive and intransitive use, but if a transitive verb was not immediately followed by a nominal object, the latter could be replaced by a deictically, anaphorically or cataphorically used third person pronoun. Later the explicit nominal object could accompany this structure, first as

⁶⁷ Nyíri (1974).

an explicatory apposition. This syntagmatic structure can, in this form, be traced back to Proto-Uralic. In a later, undefined stage — perhaps already in Proto-Ugric, but possibly only as late as in Pre-Hungarian — the syntagmatic boundary between the object pronoun and the nominal object was blurred and a unitary object syntagm came into being, in which the pronoun ultimately turned into a Vx through agglutination. The contrast that this led to was the basis of an extensive object-dependent system (i.e., an intransitive \leftrightarrow transitive distinction).

8.1.2. In the first and second persons, the verb was suffixed in all tenses and moods in the same way in Pre-Hungarian with the Vx-es going back to ancestral Uralic pronouns. A middle conjugation then emerged as separate from the original uniform conjugation first among intransitive verbs, then among verbs accompanied by an object that functions as an adverb of circumstance, with the help of various middle suffixes (the same happened in a parallel fashion with the *ik*-suffix in the third person), thereby resulting in a middle \leftrightarrow non-middle contrast. Later mediality was extended to those non-middle structures where the object was semantically not salient. In this way a distinction developed between conjugations used with no salient objects on the one hand and with salient, semantically determinate objects on the other, which has developed eventually into the current general \leftrightarrow definite contrast (intensive object-dependence).

8.2. It is possible that the earlier (extensive) object-dependence in the third person gave a sort of structural support for the reanalysis of the changes affecting the first two persons. In the third person, however, the intensive type contrast that replaced the earlier intransitive vs. transitive dichotomy reflects the analogy of the developments in the first and second persons. The two systems thus approached to each other and it was in this way that they finally settled on the present state, a contrast between general and definite transitive conjugation, whereby both systems gave up the original principle behind their emergence (mere transitivity in the third person and mediality in the first two).

8.3. Exceptions can be accounted for with reference to a process of medialisation arrested in mid-course, which can be explained in part. A convincing etymology for *-lak/-lek* is still not in view.

9. From a Uralic point of view, both the developments unique to Hungarian and typological aspects indicate that the roots of an object-dependent conjugation appear to have been present in the proto-language

only as a potentiality, and only in the third person. As an alternative to verb + object, there existed an originally complex syntagmatic combination (verb + personal pronoun object with accusative function [and form?] + appositive nominal object), which could later develop into an objective conjugation. These syntagms included the pronoun **se(m)*, which also goes back to Proto-Uralic. On this structural and material basis in the successive proto-languages of separate branches, or even more in the individual languages, independent but similar developments may have led to the emergence of an object-dependent conjugation through the agglutination of the PP to Vx in the third person. In the other persons an objective conjugation or some syntagm that could have served as its basis can perhaps be hypothesised but not argued convincingly for Proto-Uralic. The fact that the roots of the objective conjugation are Uralic only in terms of their syntactic basis and only in the third person and that the development of an overall system is later and often confined to individual languages explains why object-dependent conjugation is of different types even in those languages in which it exists. In those Uralic languages which possess no object-dependent conjugation in their current form, it either never existed or its internally developing roots withered away. The presence of Vx-es or elements of Vx-es going back to original Uralic PP-s is general in the family, but this fact—apart from the third person alternatives mentioned above—does not appear to be related to the development of object-dependent conjugation, or if it is, that relation is of a deeper, typological nature (and thus can lead to similar results in various languages independently of their genetic relatedness).

10. From a typological point of view, the organising principle of object-dependent conjugations shows universal tendencies independent of genetic relatedness and areal coherence.⁶⁸ For instance, the fact that in Hungarian the original Vx-es going back to personal pronouns are found in the object-oriented, and not in the non-object-oriented, conjugation, is by no means unique; it is actually an instantiation of a globally dominant, if not universal, tendency. Thus it seems desirable to explain them with reference to motivating forces that are relevant independently of genetic and areal constraints instead of ad hoc and specific events. Only such principles can explain why similar structures and systems develop in

⁶⁸ And it also appears to be universally accidental: an object-dependent conjugation may appear in any language at any time, but this is never necessary.

unrelated languages or why dissimilar structures and systems develop in related languages. The present study is based on the assumption that medialisation, which explains the distribution of original Vx-es on the basis of the separation of the non-object-oriented from the ancestral conjugation, and thus presents the reanalysis as object-oriented of the reflexes of the original forms as the consequence, and not the cause (let alone the goal) of this process, may be such a diachronic linguistic tendency, “independent of time and space”.

Deep diachronic typological causes may account also for the universal tendency that the reflexes of the original Vx-es appear as object-marking, and not subject-marking, elements in analytic object-dependent conjugations too, or — which may be even more distantly related to all these considerations — that in certain languages while the (elements of) Vx-es going back to personal pronouns mark the subject, they do so only on transitive verbs. This ancient relation between transitive verbs and their objects, which is a more intimate relation than that between the same verbs and their subjects, and which is highlighted by all these phenomena, goes back, in all likelihood, to pretransitive (and thus prenominal and preergative) sentence structures — but this would lead us too far.

Let us also note that the intensive partiality of object-dependent conjugation also shows universal tendencies. For instance — as one would perhaps expect given what has been said above — it is generally true that where object-dependent conjugation exists only in one person within a paradigm, that person is always the third, never the first or the second. Furthermore, a number of languages point to the fact — which we cannot explain — that where object-dependent conjugation exists only in one tense, that tense is always (one of) the past tense(s), never the present or the future. A hypothesis can perhaps be formed that if object-dependent conjugation emerges in a language, it is most likely to do so in the third person of the past. Hungarian indicates that this tendency is not without exception, but that it may nevertheless be relevant to indigenous systems has been proved recently — through diachronic analysis, without reference to this universalist hypothesis — in the diachronic derivation of the objective conjugation of Mordvin, once again a Finno-Ugric language.⁶⁹

⁶⁹ Keresztes (1999, esp. 106).

References

- Abaffy, Erzsébet E. 1991. Az ikes ragozás kialakulása. A határozott és az általános ragozás elkülönülése [The emergence of the *ik*-conjugation. The separation of the definite and the general conjugations]. In: Loránd Benkő – Erzsébet E. Abaffy – Endre Rácz (eds): *A magyar nyelv történeti nyelvtana. 1. kötet: A korai ómagyar kor és előzményei* [A historical grammar of Hungarian. Volume 1: Early Old Hungarian and its antecedents], 125–39. Akadémiai Kiadó, Budapest.
- Berrár, Jolán 1957. Magyar történeti mondattan [Hungarian historical syntax]. Tankönyvkiadó, Budapest.
- Berrár, Jolán 1967. Mondattörténet [Historical syntax]. In: Géza Bárczi – Loránd Benkő – Jolán Berrár: *A magyar nyelv története* [The history of the Hungarian language], 389–486. Tankönyvkiadó, Budapest.
- Budenz, József 1890–1892. Az ugor nyelvek szóragozása I. Igeragozás [The inflectional morphology of Ugric languages I. Verbs]. In: *Nyelvtudományi Közlemények* 22: 417–40.
- Büky, László – Tamás Forgács (eds) 2001. A nyelvtörténeti kutatások újabb eredményei II. Magyar és finnugor alaktan [Recent developments in historical linguistics II. Hungarian and Finno-Ugric morphology]. JATE, Szeged.
- Comrie, Bernard 1980. Inverse verb forms in Siberia: evidence from Chukchee, Koryak and Kamchadal. In: *Folia Linguistica Historica* 1: 61–74.
- Csúcs, Sándor 2001. Tárgyas ragozás az uráli nyelvekben. [Objective conjugation in Uralic]. In: Büky – Forgács (2001, 29–36).
- É. Kiss, Katalin 2003. A szibériai kapcsolat, avagy miért nem tárgyasan ragozzuk az igét 1. és 2. személyű tárgy esetén [The Siberian connection or why verbs are not objective with a first and second person object]. In: *Magyar Nyelvjárások* 61: 321–6.
- Feoktistov, Aleksandr P. 1966. Эрзянский язык. In: Vasilij I. Litkin – Klara Y. Maytinskaya (eds): *Языки народов СССР, Том третий, Финно-угорские и самодийские языки*, 177–98. Наука, Москва.
- Gergely, Piroska B. 2001. Az általános és határozott igeragozás keveredése a XVI.–XIX. századi Erdély beszélt nyelvében. [The vacillation between general and definite verbal conjugation in the colloquial language of 16–18th century Transylvania]. In: Büky – Forgács (2001, 19–28).
- Gombocz, Zoltán 1930. Über die Haupttypen der ungarischen Verbalformen. In: *Ungarische Jahrbücher* 10: 1–15.
- Hajdú, Péter 1966. Bevezetés az uráli nyelvtudományba [Introduction to Uralic linguistics]. Tankönyvkiadó, Budapest.
- Hajdú, Péter 1985. Уральские языки и народы. Прогресс, Москва.
- Havas, Ferenc 2003. A tárgy tárgyában. Mondattipológiai fontolgatások [On the object. Sentence-typological considerations]. In: Oszkó – Sipos (2003, 7–44).
- Honti, László 1996. Az uráli nyelvek tárgyas ragozású igealakjainak történeti előzményéről [On the history of objective verb forms in Uralic languages]. In: András Bereczki – László Klima (eds): *Ünnepi könyv Domokos Péter tiszteletére*

- [Festschrift for Péter Domokos.] (Urálistikai tanulmányok 7), 127–32. ELTE BTK Finnugor Tanszék, Budapest.
- Honti, László 1998/1999. Gondolatok a mordvin tárgyas igeragozás uráli alapnyelvi hátteréről [On the Uralic background of the Mordvinian objective conjugation]. In: Nyelvtudományi Közlemények 96:106–19.
- Hunfalvy, Pál 1862. A személyragok viszonyáról a birtokra és a tárgyra a magyar nyelvben [On the relation between personal endings and possessives and objects]. In: Nyelvtudományi Közlemények 1:434–67.
- Juhász, Dezső 1999. A történeti nyelvtan néhány kérdése a nyelvföldrajz szemszögéből [Some questions of historical grammar in view of linguistic geography]. In: László Büky – Tamás Forgács (eds): A nyelvtörténeti kutatások újabb eredményei I. Magyar és finnugor mondattörténet [Recent developments in historical linguistics I. Hungarian and Finno-Ugric historical syntax], 81–90. JATE, Szeged.
- Keresztes, László 1999. Development of Mordvin definite conjugation. SUS, Helsinki.
- Klemm, Antal 1928–1942. Magyar történeti mondattan [A historical syntax of Hungarian] I. 1928, II. 1940, III. 1942. Pécsi Egyetemi Könyvkiadó és Nyomda, Budapest.
- Körtvély, Erika 2003a. A determinált igeragozás használati problémái a tundrai nyenyecben [The use of the determinate conjugation in Tundra Nenets]. In: Oszkó–Sipos (2003, 96–113).
- Körtvély, Erika 2003b. A tundrai nyenyec igeragozás [The Tundra Nenets conjugation]. Doctoral dissertation, Szegedi Tudományegyetem, Szeged.
- Lommel, Arle R. 1998. An ergative–absolutive distinction in the Hungarian verbal complex. In: LACUS Forum 24:90–99.
- Melich, János 1913. A magyar tárgyas igeragozás [The Hungarian objective conjugation]. In: Magyar Nyelv 9:1–14.
- Mészöly, Gedeon 1931. A *Halotti Beszéd* tárgyas elbeszélő múlt alakjai [The objective narrative past forms in the *Funeral Speech*]. MTA, Budapest.
- Mészöly, Gedeon 1941. Az ikes ragozás *-ik* ragjának eredete [The origin of the *-ik* suffix in the *ik*-conjugation]. In: Nyelvtudományi Közlemények 51:1–13.
- Miyaoka, Ahito 1996. Sketch of Central Alaskan Yupik, an Eskimoan language. In: Ives Goddard (ed.): Handbook of North American Indians, Volume 17: Languages, 325–35. Smithsonian Institution, Washington.
- Nyíri, Antal 1974. A magyar igeragozás története [The history of the Hungarian verbal conjugation]. In: Magyar Nyelv 69:140–58.
- Osnovi 1974. Основы финно-угорского языкознания (Вопросы происхождения и развития финно-угорских языков). Наука, Москва.
- Oszkó, Beátrix – Mária Sipos (eds) 2003. Budapesti Uráli Műhely III. MTA Nyelvtudományi Intézet, Budapest.
- Papp, István 1942. Mi a szó funkciója? [What is the function of the word?]. In: Magyar Nyelv 38:272–6.
- Papp, István 1968. Unkarin kielen historia. SKS, Helsinki.
- Rédei, Károly 1962. A tárgyas igeragozás kialakulása [The development of the objective conjugation]. In: Magyar Nyelv 58:421–35.

ON THE GRAMMATICALIZATION OF THE ESTONIAN PERFECTIVE PARTICLES*

ANNE TAMM

Abstract

This article presents two grammaticalization types of separable perfective particles in Estonian. The bounding particle (BP) use of the semantically most bleached Estonian separable verbal particle *ära* is demonstrated to display a distinct status in the grammaticalization of aspect. The special character of the BP is illustrated by contrasting the BP *ära*, on the one hand, with the well-established use of the particle with the same form (*ära*) and, on the other hand, several other perfective particles, which are referred to here as instances of completive particles (CP). The study of differences brings out the following novel facts about the BP. The particle occurs only in context-dependent, agentive sentences that typically describe the achievement of planned or foreseen endpoints of events. The perfective sentences with the BP contain primarily activity verbs; however, verbs in such sentences can belong to all aspectual classes, and the combinations are transparent. The occurrence of an argument that would serve as a “measure” for the event is thereby optional. The evidence that the BP and verb combinations do not allow for the derivation of adjectives (participles) also demonstrates the difference between the principles of combining a verb and a BP as opposed to a CP.

1. Introduction

The topic of this paper is the grammaticalization of Estonian aspect. I will show that changes are taking place in the use of what are traditionally called perfective particles in Estonian. More specifically, I will draw the reader’s attention to the emergence of what is termed here the **bounding particle**. I will present evidence that some uses of the particle *ära*, illustrated in example (1), are significantly different from the well-established uses of the same perfective particle (presented in section 3.1) and other perfective particles.

* I am grateful to the audience of the Uralic Workshop in Budapest and the anonymous reviewers. I am grateful to András Komlósy, Helle Metslang, Chris Piñón, and Gabriella Tóth for commenting on several earlier versions of the paper and Chris Piñón for discussing the particle *ära* before my presenting the paper at the workshop. Mistakes are my responsibility.

- (1) Mind kutsuti reklaamipäevale klouni mängima.
 I.part invite.impers.past advertising_day.all clown.part play.ma-inf
 Mängisin klouni ära ja sain sada krooni.
 play.1sg.past clown.gen ptcl and get.1sg.past a hundred.nom kroon.part
 'I was invited to play a clown on the advertising day. So I played the clown and
 got 100 kroons.' (Reporting data on colloquial usage, Metslang 2001)¹

This use of the semantically most bleached separable verbal particle *ära* has the following characteristics:

- 1 it occurs typically in embedded, agentive contexts describing planned or foreseen events; it occurs only in sentences where the details about the participants of the event and the identity of the event is pre-defined;
- 2 it is not a subcategorized argument of a verb and not a verb modifier;
- 3 its base verbs may belong to any of the Vendler aspectual classes, the thematic role of the verb's internal argument is not restricted;
- 4 it occurs only in colloquial speech.

The paper starts with a brief comparison with an earlier approach to the grammaticalization of Estonian aspect in verbal particles (section 2), followed by an introductory section on the data about the two uses of the particle (section 3). The rest of the paper presents the various differences between the particles in three parts: the aspectual nature of verb-particle combinations, including the interpretation of the result (section 4), combinability with verbs (section 5), syntactic differences (section 6). Section 7 presents the grounds for assuming the uses of the bounding particle as first signs on the way of a further stage in the grammaticalization of aspect in Estonian. Section 8 is the conclusion.

2. Difference from earlier approaches

Metslang (2001) describes the grammaticalization history of the particle *ära* 'away, up' as evolving from a directional adverbial ('away') to a

¹ I have reglossed the examples in order to unify glosses throughout the paper. The glosses will in some cases be omitted, for instance, when longer contexts are presented or the translation is unambiguous. The morphologically **genitive** or **nominative** (typologically or functionally rather to be seen as accusative, cf. Pusztaý 1994, 48, Hiietam 2003) object case is referred to as the **total object case**, glossed according to the morphological form. The object bearing this case is referred to as the **total object**.

purely perfective particle. The grammaticalization of the particle progresses through the three stages of directional and deictic meaning to directional deictic perfective meaning and to purely perfective meaning (Metslang 2001). Metslang writes that these three steps are present in Modern Estonian. First, the directional, deictic meaning, as in the example with the verb-particle combination *ära saatma* 'send, accompany away; see someone off' in example (2), quoted from Metslang.

- (2) Ta saatis külalise ära.
he/she.(nom) accompany.(3sg.)past guest.gen ptcl
'He/she saw the guest off.' (Metslang 2001, 445)

The second step and the second meaning are described as the perfective and deictic meaning in the sense of 'off, from the area of the deictic centre, to non-existence' (Metslang 2001, 445). This meaning is illustrated by the verb-particle combination *ära tappa* 'kill' and *ära kaotama* 'lose' as in the following example sentence (3), taken from Metslang (2001):

- (3) Ta tappis külalise ära.
he/she.(nom) kill.(3sg.)past guest.gen ptcl
'He/she killed the guest.' (Metslang 2001, 446)

The third meaning is called the pure perfective meaning and illustrated by an example with the verb 'give birth', illustrated here with Metslang's example in (4).

- (4) (Kas te ootate ikka veel oma beebit? 'Are you still expecting your baby?' —)
Ei, eile sünnitas Mari ta lõpuks õnnelikult ära.
no yesterday give birth.(3sg.)past Mari.(nom) he/she.gen at last luckily ptcl
'No, luckily, yesterday at last Mari gave birth to it.' (Metslang 2001, 446)

Thus, schematically, Metslang's typology of the particle *ära* has the divisions as in Table 1.

Table 1

Metslang's stages of grammaticalization: the meanings of the particle *ära*

Stage 1	Stage 2	Stage 3
Directional deictic	Perfective+deictic	Purely perfective
<i>ära saatma</i> 'see s.o. off'	<i>ära tappa</i> 'kill', <i>ära kaotama</i> 'lose'	<i>ära sünnitama</i> 'give birth', <i>ära suudlema</i> 'kiss', <i>ära sooritama</i> 'accomplish', <i>ära korraldama</i> 'organize', <i>ära anastama</i> 'occupy'

I will demonstrate that the distinction between stage 2 and stage 3 particles can be drawn more clearly. Metslang's statement about the path of grammaticalization of the verbal particles is a good starting point to explain the principles for a clearer division of Estonian perfective verbal particles. Metslang writes about the path of grammaticalization that "[t]he Estonian verbal particles take a position along the path of directionals → completive → perfective" (Metslang 2001, 445). The division in the stage 3 data on particles reflects the fact that stage 3 particle uses may house both **completive** and **non-completive** uses, where completiveness is understood as the completion of the event with regard to encompassing² an argument totally. Metslang's stage 2 particles are all completive. Therefore, one group of instances of stage 3 particles differs from another group of instances of the same stage 3 significantly more than from the instances of stage 2 particles. My point is that although Metslang defined the classes as being combinations of lexical items with the particle, some of her examples (the type 3 ones) are **free**, not argument structurally restricted combinations. I divide the perfective uses of the particle *ära* into two subuses: **completive** and **bounding**. These are referred to further as CP, shorthand for **completive particle**, and BP, shorthand for **bounding particle**. Table 2 below depicts my classification of Estonian perfective particles according to their aspectual nature and their relation to the arguments of the verb. This article does not discuss the various directional and completive particles in detail.

This division helps, on the one hand, to clearly distinguish uses that are close to what Metslang terms purely perfective from completive perfective uses. On the other hand, non-deictic and non-directional particle-verb combinations such as (*tuba*) *ära koristama* 'tidy, clean (up) the room', which remain somewhat vaguely placed between pure perfective and directional deictic in Metslang's grammaticalization stages, are better integrated in the classification as the completive uses of the particle. There is no disappearance of the room in the course of the cleaning activity, but the particle denotes the completion of the room's changes of state from dirty to clean. On the other hand, this example differs from the ones associated by Metslang with the purely perfective meaning. The follow-

² Encompassing (this is a term that bears close resemblance to Kont (1963)'s term *haarama* 'grasp, encompass') is taken here as the total or complete traversal of the argument, as in *read a book*, creation or destruction of it, or a radical change of state of it.

Table 2
The Estonian perfective particles

DIRECTIONAL (<i>ära</i> , <i>minema</i> , <i>tulema</i> 'away', etc.)	COMPLETIVE (<i>ära</i> 'completed', <i>maha</i> 'down', <i>läbi</i> 'through', <i>välja</i> 'out', <i>üles</i> 'up', see Hasselblatt (1990) for more examples)	BOUNDING (<i>ära</i>)
Denotes the completion of a path, e.g., to 'away'	Denotes the result or completion of the activity or process encompassing an argument	Denotes the bounding of an activity
<i>ära saatma</i> 'see s.o. off', <i>minema</i> 'go away', <i>tulema</i> 'come away', <i>välja minema</i> 'go out', <i>ära jooksmas</i> 'run away'	<i>ära tapma</i> 'kill', <i>ära surema</i> 'die', <i>ära kaduma</i> 'disappear', <i>ära kaotama</i> 'lose', <i>läbi lugema</i> 'read through', <i>ära korraldama</i> 'organize, get done', <i>ära anastama</i> 'occupy', <i>maha müüma</i> 'sell out', <i>maha rahunema</i> 'calm down', <i>välja kannatama</i> 'survive, tolerate', <i>ära puhastama</i> 'clean', <i>valmis küpsetama</i> 'bake'	<i>ära + mängima</i> 'do, finish the playing', <i>ära + jooksmas</i> 'do, finish the running', <i>ära + tegelema</i> 'do, finish the activity', <i>ära + suudlema</i> 'do, finish the kissing', <i>ära + tutvuma</i> 'do, finish the getting acquainted with'

ing three paragraphs briefly compare the particle types in their relation to the arguments of the base verbs.

Directional *ära* denotes the completion of a path to "away". The closest Hungarian equivalent is the verbal prefix *el-* (*elgurult a labda* 'the ball rolled away', *eltette a könyvet* 'he put the book away'). The closest English equivalent for this particle is *away*. Some examples follow: *ära veere(ta)ma* '(cause to) roll away', *ära panema* 'put away'. The terminus denoted by the particle pertains to the completion of the path to a terminus (endpoint or goal). The terminus is definable as a place different from the deictic centre. Verbs that combine with the directional *ära* have an implicit path argument that is not obligatorily realized as an overt syntactic argument. This article is not concerned with the directional and deictic meanings of the particle *ära*.

Completive *ära* denotes the result or completion of the activity or process directed to a theme, experiencer or a patient argument (cf. the Hungarian types of arguments considered in É. Kiss 2004). The closest Hungarian equivalent is *meg-* (*meghalt a hörcsög* 'the hamster died', *megolvasztotta a jeget* 'he melted the ice'; *el-* for verbs of disappearance *elhunyt* 'passed away'). Examples are *raiskas ära* 'misspent', *tappis ära* 'killed', *sulas ära* 'melted'. Further examples of verbs that typically combine with CP are *lugema* 'read', *sööma* 'eat', *surema* 'die', and *sulatama* 'cause to melt', *koristama* 'clean (up) the room', and *armuma* 'fall in

love'. The terminus denoted by the particle pertains to the completion of a change of state and the attainment of a result state. Typically, the terminus denoted by the particle pertains to the completion of an activity or a process that encompasses the whole extent of the theme, patient or experiencer argument referent. The result is definable as a state that is an opposite, or in any case a significantly different state from the previous state. Verbs that combine with the CP *ära* have a theme or patient argument that is obligatorily realized in overt syntax as an object or a subject. There are many subtypes of the CP, and they will not be discussed in detail here.

Bounding³ *ära* denotes the achievement of the endpoint of an intended, planned, scheduled, or foreseen event. It occurs in transitive and intransitive sentences. Hungarian and English have no close equivalent, perhaps Hungarian *meg-* (*megebédelt* 'had his dinner', *megfőzők* 'I'll do the cooking'; Kiefer 2000, 297), some Aktionsart-related uses of *ki-* (*ki-alussza, kijátssza magát* 'sleeps, plays his share, as much as needed', cf. Kiefer 2000, 292), or purely perfectivizing *kitakarítok* 'I'll do the cleaning' (Kiefer 2000, 297) resemble the Estonian bounding *ära*. The Hungarian *túl*-prefixation is close to the BP *ära* in its nature of being unrelated to the progress along the object argument, as in *X túlélte Y-t* 'X lived longer than Y'. In English, *out*-prefixation is perhaps closest to the BP *ära*-prefixation. In an example like *X outate Y*, the object argument is not related to the progress of the event—exactly as in the case of the BP *ära*. In its bounding nature and temporal independence of the event's evolvment and the verb's arguments, the particle also bears resemblance to the Russian perfective aspectual prefix *po-*. However, the bounding particle *ära* does not only indicate temporal boundedness; it also denotes the reaching of a distinct terminus, an endpoint. In this respect, the BP resembles more Hungarian *le-* or Russian *pro-* (as in *ledolgozott három évet, on prorabotal tri goda* 'he worked for three years, he spent three years working'). However, the endpoint in sentences with the BP is not necessarily related to the temporal measure argument, as the examples in the following sections will demonstrate. The BP *ära* is thus between

³ Ackerman and Moore (2001) introduce a patient protorole that they term *bounding*. Their Estonian predicates containing *ära* have the "bounding" patient protorole entailment. My term *bounding* applies to a narrower set of uses of *ära* compared to what appears in their predicates with the bounding proto-role entailment in that I do not consider only resultative predicates. See this source and Kiefer-Honti (2003) for more details about Estonian predicates and particles.

po- and *pro-*, denoting the bounding of the event independently of the arguments exactly as *po-*, but retaining the endpoint-oriented character of *pro-*. In its bounding meaning, the bounding particle resembles measure phrases. Some examples of sentences with the bounding particle are *mängis ära* 'did the intended, necessary playing, got done with the playing', *suudles ära* 'did the planned kissing, was done with the kissing'. Further examples of attested verbs that, perhaps less typically, can combine with the BP are *jooksuma* 'run', *tegelema* 'be busy with', *tutvuma* '(make efforts to) get acquainted with', *ehitama* 'build', and *küpsetama* 'bake'. The verbs that combine with the BP *ära* typically have an agent argument that is either realized in overt syntax or not (e.g., in impersonal, imperative sentences).

In sum, the relevant distinction between these particle types as seen in this article is based on the lexical semantics of the base verbs, more specifically, on the involvement of the argument structure of the verbs in their combinations with these particles. The completive particle adds the meaning element of the completion of encompassing an argument (or its property) to the full extent, as described by the verb. The bounding particle denotes the reaching of an independent planned, scheduled or intended endpoint of the activity, not necessarily related to the encompassing of an argument of the verb. The bounding particle occurs in sentences where the planning involves the event itself as described by the verb as well as the referents of the arguments of the verb. These differences suggest that the BP can be considered as a possible step further in the grammaticalization of Estonian perfectivity. The following subsection presents more data on the distinct uses.

3. Introducing the data: bounding vs. completive particles

3.1. The completive particle

In this subsection I will present some typical examples of one of the Estonian CP-s, the CP *ära*. Typically, consumption verbs such as *sööma* 'eat' as in (5) combine with the particle *ära* in its completive meaning type.

- (5) Laps sõi kukli ära.
 child.(nom) eat.3sg.past roll.gen ptcl
 'The/a child ate the/a roll up.'

As the result of the eating activity as described in sentence (5), the roll has necessarily disappeared, whatever the context.

- (6) Päike sulatas jääpurika ära.
 sun melt.3sg.past icicle.gen ptcl
 'The sun melted the/an icicle.'

As the result of the process evoked by the inanimate natural force causer as described in (6), the icicle has necessarily disappeared.

- (7) Hamster suri ära.
 hamster die.3sg.past ptcl
 'The hamster died.'

As the result of the events as described in (7) and (8), the hamster and the companion are dead.

- (8) Ta tappis oma kaaslase ära.
 s/he kill.3sgpast own companion ptcl
 'S/He killed his/her companion.'

Data on particle-verb combinations such as described here are to be found in many sources, such as the Grammar of the Estonian Standard Language (Erelt et al. 1993), Hasselblatt (1990), or Rätsep (1978). The typical, earlier relatively well-described particle uses are all **completive** uses of the particle (for the most extensive study, see Hasselblatt 1990). Metslang (2001) serves as a unique source since it contains a couple of cases recorded earlier of which I demonstrate that they cannot be analyzed as completive particle uses. Many examples in this paper are an elaboration of Metslang's examples.

3.2. The bounding particle

In this subsection I will introduce the BP *ära*. The example sentences that I present about the bounding particle do not typically occur in written language.⁴ The following example of the BP, presented in (9), is a combination with the activity verb of manner of motion *jooksmas* 'run'.

⁴ The translations that I provide are not literal since there is no exact single literal translation that would convey the correct bounding meaning. Instead, I offer exact glosses but several free translations. As in (1), it is necessary for the purposes of illustration to provide examples of a possible (but note, not the **only** possible) context.

- Rédei, Károly 1989. A finnugor igeragozásról, különös tekintettel a magyar igei személyragok eredetére [On Finno-Ugric verbal conjugation with respect to the origin of the Hungarian personal endings]. In: Nyelvtudományi Közlemények 90: 143–60.
- Thomsen, Vilhelm 1912. A magyar tárgyas ragozásról néhány megjegyzés [Remarks on the Hungarian objective conjugation]. In: Nyelvtudományi Közlemények 41: 26–9.
- Wacha, Balázs 1974. Az ige és a tárgy kapcsolata a magyarban [The relation between verb and object in Hungarian]. In: Nyelvtudományi Közlemények 76: 157–81.
- Yaziki mira... 1997. Языки мира. Палеоазиатские языки. Индрик, Москва.
- Yaziki mira... 1999. Языки мира. Иранские языки II. Северо-западные иранские языки. Индрик, Москва.

Address of the author: Ferenc Havas
Department of Finno-Ugric Studies
Eötvös Loránd University
Pf. 107
H-1364 Budapest
fhavas@ludens.elte.hu

küpsetama 'bake' (13), or with incremental theme verbs such as *lugema* 'read' (14).⁶

- (13) Ta küpsetas koogi ära ja...
 s/he bake.3sg.past cake.gen ptcl and
 'S/He did the baking of the cake, s/he finished baking a cake and...'

In this sentence, the agent has previously decided to bake a cake, perhaps as a task. Having accomplished the cake baking, s/he goes on with another activity, task etc. Again, what is primarily described is not a resultant state of the cake. As the result of what is described in sentence (14), the agent is successfully over with the baking of the cake. This can be imagined as a part of a cooking-lesson at school, where a succession of tasks must be performed and marks are given. The following (14) presents a similar example, with the verb *lugema* 'read'.

- (14) Ta luges raamatu ära ja...
 he/she read.3sg.past book.gen ptcl and
 'S/He did the reading of the book, s/he finished reading the book and...'

In this sentence, again, the agent has previously decided to read (some parts of) a given book, to do some reading of the book. As the result of what is described in sentence (14), s/he has read as much from the book as necessary, perhaps the whole book, or the necessary parts of it, or a certain necessary span of time is spent reading.

In sum, on the basis of the difference in the interpretation of the uses of the verbal particle *ära* there is evidence that the grammaticalization status of the verbal particle *ära* can be split into two types: the **completive** and **bounding** grammaticalization types. Further evidence is provided in three main parts: 1. Aspectual differences (section 4), 2. Lexical differences (section 5), 3. Syntactic differences (section 6).

⁶ However, there is variation in judgments concerning the details about the verbs and contexts where the BP can occur. Even if many Estonian speakers intuitively feel that practically all or at least many verbs occur with *ära*, a more specific situation boundary is somehow "more correct" and the use of *ära* is "parasitic". Lexical restrictions and the typicality of situations are the two distinctions that may cause uncertainty in discussions of examples that follow here in (13)–(14). The data represented here is approved by and commented on by at least one additional native speaker.

4. The aspectual nature of verb-particle combinations

4.1. Aspect of base verbs, changes in aspectual class

In this subsection I will discuss that the two different particle types tend to combine with different, but not mutually exclusive aspectual classes of verbs. While CP-s combine mainly with accomplishment and achievement verbs, there are examples of BP combinations with most verbs, activity verbs being the most typical ones to combine with BP-s. Table 3 presents examples of the particles' combinability with verbs.

Table 3
Particles and the Vendler classification

Particle	CP + verb	BP+ verb
Achievement	<i>surema</i> 'die', <i>tapma</i> 'kill', <i>hävõtama</i> 'destroy'	<i>tutvuma</i> '(make efforts to) get acquainted with'
Accomplishment	<i>sööma</i> 'eat', <i>loomä</i> 'create', <i>sulama</i> 'melt'	<i>ehõtama</i> 'build', <i>küpsetama</i> 'bake'
Activity/process	<i>koristama</i> 'clean', <i>lugema</i> 'read'	<i>mängima</i> 'play', <i>jooksma</i> 'run', <i>tegelema</i> 'be busy with', <i>suudlema</i> 'kiss'
State	—	<i>olema</i> 'be'

Verbs that combine with the CP are mainly predicates that have a possible built-in endpoint or culmination in their meaning, thus accomplishment (*sööma* 'eat') or achievement verbs (e.g., *surema* 'die'). The event that the verb denotes is such that it can encompass an argument completely. In contrast to the CP, the BP primarily occurs with activity verbs such as *mängima* 'play', *jooksma* 'run', *tegelema* 'be busy with', *suudlema* 'kiss'. The BP occurs with accomplishment verbs, such as *ehõtama* 'build', and *küpsetama* 'bake'. The BP is the only particle that occurs with some achievement verbs such as *tutvuma* '(make efforts to) get acquainted with'. Occasionally, the state verb *olema* 'be' in the sense of 'be somewhere' combines with the BP.

In conclusion, the two different particle types clearly combine with different, but not mutually exclusive aspectual classes of verbs. While CP-s typically combine with accomplishment and achievement verbs, even if the most typical BP combinations are with activity verbs, there are examples of BP combinations with all aspectual classes of verbs.

4.2. The nature of the endpoints of the events

This subsection articulates the difference between the endpoints of the events that are described. The CP describes a result that pertains to the completely encompassed state of an argument; the endpoint of the event denoted by the BP pertains to the achievement of an expected or scheduled change in a situation. The endpoint that is denoted by the BP may, but need not, coincide with any result that involves the argument.

4.2.1. CP results

The CP *ära* denotes an endpoint that is a result state of the complete encompassing of the theme, patient, or experiencer argument. As the result of the activity that is described by the verb and described to be fully completed by the CP, the participants of the event are changed, created, traversed or destroyed totally. The resultant state of the roll from sentence (5) with the verb *eat* and that of the icicle from sentence (6) with the verb *melt* is that they have disappeared. The resultant state of the hamster from sentence (7) with the verb *die*, or the companion from sentence (8) with the verb *kill* is that they do not exist any more. In a way, the participants of the described events are *ära* 'away' in Metslang (2001)'s sense of fully not being in the area of the deictic center, being off or away. There are more examples where *ära* only adds the completive meaning. For instance, the room is not *ära* 'away', but *ära koristatud* 'cleaned up, tidy' as the result described by CP-verb combinations such as in sentence (15) with the verb *koristama* 'tidy'.

- (15) Mari koristas toa ära.
 M.nom clean.3sg.past room.gen ptcl
 'Mari cleaned the room.'

The patient participant of the event is changed totally in one of its qualities.

4.2.2. BP endpoints

In contrast to CP results, the BP denotes the achievement of an expected or scheduled change in a situation through reaching a boundary or endpoint. Similarly to typical CP results, the state of the argument *kloun* 'clown' described in (1), with the verb *mängima* 'play', cannot be described with what is the lexical content of *ära*. But differently from the CP combinations, sometimes the change of state does not even involve the argument since the clown is non-referential in (1). There is no

necessary change involved in the referential arguments, such as in the sentence (12) (with *suudlema* 'kiss'), either. However, the claim that there is no change that involves an argument is somewhat more difficult to support in the case of verb-BP combinations where the meaning of the base verb contains already a built-in endpoint and the arguments do undergo a change. For instance, the activities of baking the cake (13) or reading the book (14) can be understood as finished and completed. But crucially, what is described in the BP sentences (1), (9)–(14) is not a complete change in the argument referent. Exactly this argument-relatedness is the key to the relevant difference between BP results and CP results. Let us compare the verb *lugema* 'read' in combination with the CP *läbi* (15) (see more on different CP-s in section 5.3) and the BP *ära* (16) in the following two sentences:

- (16) Ta on raamatu läbi lugenud...
 he/she be.3sg.past book.gen ptcl/through read.act.ptcpl
 'S/he has read a/the book through...'
 #...pool sellest loetud raamatust jäi lugemata,
 half of this read book left unread
 selle peab ta homme lugema.
 this.gen must he tomorrow read.ma-inf
 '...half of the read book remained unread, this s/he is going to read tomorrow.'

What is described in (16) entails that the whole book is read through. The following sentence (17) entails that some reading is done, but the result of a book being read through is not an entailment but an implicature as evidenced by the cancellation.

- (17) Ta on tänaseks oma raamatu ära lugenud...
 s/he be.3sg.past today.transl his/her book.gen ptcl read.act.ptcpl
 'S/he has done her reading of the book (book-reading) for today...'
 ?...pool sellest loetud raamatust jäi lugemata,
 half of this read book left unread,
 selle peab ta homme lugema.
 this.gen must he tomorrow read.ma-inf
 '...half of the read book remained unread, this s/he is going to read tomorrow.'

The outcome in (17) is that as for the book, the reading of it has been accomplished to some extent at least. As for the intended goal of the activity, what is described in (17) entails that this goal is fully reached by doing the reading exactly to the extent it was done.

5. Lexical differences among the base verbs

This section presents further evidence that BP and CP must be considered as separate phenomena. First, the lexical semantic characteristics of the base verbs that the BP and CP combine with are different, and the way the lexical semantics of the base verbs interacts with the meaning of the particles is also different. Second, while the BP combines more freely and the combinations are always transparent, the different CP-s combine with verbs according to the verbs' lexical semantic class. Also, only CP-s occur in opaque verb-particle compositions.

5.1. Selection criteria of the particle for the thematic roles involved

This section demonstrates that the occurrence of the bounding particle is not restricted according to the thematic roles of the base verb. The occurrence of the completive particle is restricted to verbs with a theme, a patient, or an experiencer argument.

5.1.1. The CP

The CP combines only with verbs that have an internal argument. The verbs that combine with the CP have typically either a theme or a patient argument (*surema* 'die', *sööma* 'eat', *tapma* 'kill', *sulatama* 'melt'). These are the thematic roles that are relevant for expressing aspectual oppositions that are frequently referred to as phenomena of telicity, or delimitedness (cf. Krifka 1992, Tenny 1994). These CP-verb combinations that have theme, patient, or experiencer arguments typically denote the following types of changes:

(a) a change of state (*ära koristama* 'clean', *ära hellitama* 'spoil by pampering', *ära jahtuma* 'cool down', *ära hirmutama* 'scare s.o. to death', *ära harjuma* 'get accustomed', *ära rikkuma* 'spoil, ruin', *ära ummistuma* 'get stuck', *ära seedima* 'digest', *ära vaevama* 'tire, vex', *ära venitama* 'ruin by stretching', *ära hõõrduma* 'get scratched, suffer friction'), typically denoting gradual progress through a succession of changes of states, also mental; frequently in the sense of deterioration or harm;

(b) traversal, change of state via incremental progress through or over the extent of the theme argument (*läbi lugema* 'read through', *ära sööma* 'eat up', *ära õgima* 'devour', *ära tallama* 'trample down', *ära õppima* 'learn', *läbi kuulama* 'listen to all of it', *valmis kirjutama* 'write up', *üles tähendama* 'write down', *läbi mängima* 'play through', *ette kandma* 'perform', *ära jaotama* 'divide', *ära seletama* 'explain').

(c) complete mental encompassing of an incremental theme by the senses, *ära kuulma* 'hear all of it, have it heard', *ära nägema*, *kaema* 'see all of it, have it seen', *ära proovima* 'give it a try', *ära katsuma* 'touch', *ära kannatama* 'survive or tolerate the whole extent of it'.

(d) creation and destruction, coming into existence and ceasing: *ära tapma* 'kill', *valmis küpsetama* 'bake ready', *valmis ehitama* 'build so that it is ready', *ära tarvitama* 'use up', *ära hävitama* 'destroy'.

The completive particle denotes the completion of the change or the progress through (a property of) the theme, patient, or experiencer argument. The complete change of the argument referent (*koristama* 'clean'), or the complete traversal of it (*lugema* 'read') determines the endpoint of the event. The external argument of these verbs can have the agent thematic role as in the case of *sööma* 'eat', *tapma* 'kill', but this is not a necessary condition, e.g., *sulatama* 'melt', *armuma* 'fall in love', or *surema* 'die'.

5.1.2. The BP

In contrast to the CP, the occurrence of the BP is not dependent on the thematic nature of the internal arguments of the verb, and the verbs combining with it are primarily intransitive-agentive or transitive. The thematic role of the internal argument of the verb, direct or indirect, displays a variety of possibilities: instrument (*mängima* 'play', *tegelema* 'be busy with'), theme, and patient (*suudlema* 'kiss', and *küpsetama* 'bake'). The presence of a direct internal argument is not a necessary condition for BP-verb combinations: in case of *mängima* 'play', the argument is optional, in case of *tegelema* 'be busy with', there is none. Section 6.2 below presents the data about the omitted objects. Whether the meaning of the verb with its arguments entails a change and whether the progress of the event needs to involve incremental traversal through the (properties of) arguments is irrelevant in case of combinations with the BP (see the description of the data in 3.2 and 4.2.2). The BP occurs with verbs the external argument of which is an agent. The requirements that emerge for combining with the BP are strikingly similar to the conditions of the durative (progressive) interpretability of Estonian achievement and accomplishment verbs. Kiefer (1992, 100), commenting on the conditions of the formation of the Hungarian progressive with prefixed/perfective-durative verbs, notes that the condition that the agent must act intentionally is not part of grammar but is rather a cognitive principle based on everyday knowledge. This principle can be assumed to work here. The BP

occurs if the described event is carried out according to a plan or expectation, planning and expectations in turn require that there be a planner or evaluator. This cannot be non-human or at least not inanimate.

5.1.3. BP and CP compared

In sum, the occurrence of the CP is dependent on the nature of the direct internal argument's thematic role. Differently from the CP, the BP is more felicitous (but not restricted to) with verbs the subject of which has the agent thematic role, whereas the object's thematic role does not constrain the verb's combinability with the BP. The BP does not complete any activity related to an argument but denotes the completion of an event according to a plan or expectation. For felicity reasons, there must be a planner.

5.2. Transparency of meaning of the combinations

While opaque verb-particle combinations are abundant with the CP, there are no clear instances of BP-s in opaque verb-particle combinations. Both perfective particles can form transparent, compositional particle-verb combinations. Occasionally, a CP-verb complex has a partitive object, since the whole opaque lexical complex denotes a state or an activity and the completive-resultative meaning component is missing, e.g., *ära kasutama* 'take advantage of, use in one's own interests, use for one's own purposes' or *üles näitama* 'show, expose' have a partitive object in sentences. Normally, however, the opaque CP-verb combinations have total objects, as in *jagama* 'divide' – *ära jagama* 'grasp, understand', *virutama* 'hit' – *ära virutama* 'steal', intransitive examples: *viskama* 'throw' – *ära (üle) viskama* 'make s.o. feel fed up with sth', *pöörama* 'turn' – *ära pöörama* 'become mad, crazy'. For further opaque examples I refer the reader to Metslang (2001). Hasselblatt (1990)'s examples that are provided with the label ID, that is, idiomatic, are a further extensive source for opaque verb-CP combinations. The facts about the idiomatic combinations demonstrate that the CP is more tightly connected to the base verb.

5.3. Other perfective CP-s

Ära is the only particle with the characteristics of a BP in Estonian. In contrast, there are several means to express the completive endpoint

or result. Completion can be expressed by what are called in the Estonian tradition 'perfective or perfectivizing adverbs' such as *valmis* 'ready, completed', resultative phrases (translative-marked phrases) and several other particles that are referred to as perfective particles next to *ära* 'up, away, done', for instance, *läbi* 'up, through', *maha* 'down', *üles* 'up' (for a more exhaustive list, see Hasselblatt 1990). On the basis of many earlier sources it can be confirmed that these particles form opaque compositions with the verb.

5.4. Summary

In sum, next to the perfective particle *ära*, which emerges as two types, there are other perfective particles in Estonian. Other perfective particles display similarities with the completive perfective type only. The CP combinations are mainly transparent. Opaque combinations are attested only with the CP. This section provides more evidence that BP and CP must be considered instances of separate particle uses.

6. Syntactic differences

The data from section 5 suggest that the nature of combining the two types of particles with the verbs is different. Syntactically, however, neither of the particles emerges as a bound morpheme; they are both separable. This section presents evidence about those differences between CP and BP that appear in syntax. The discussion starts with pointing at the relevant similarities and then turns to the differences in word order, omission of objects and of particles, and derivation.

6.1. Similarities

The perfective particle *ära* is typically stressed, and typically occupies a clause-final position (see (1)–(14)). Generally it does not precede the finite verb.⁷ This generalization has some exceptions. In subordinate clauses and in other typically verb-final sentences such as interrogative

⁷ Cf. the criteria mentioned in Kiefer–Honti (2003) and see that source for more Estonian data. In the corresponding negative sentences, the negation clitic *ei* precedes the verb in its active participial form.

sentences (see Erelt 2003, 100 for these environments), and in case of neutral word order, the particle precedes the finite verb (18).

- (18) Ma ei tea, kas ta õuna ära sõi.
 I neg know if s/he apple.gen ptcl eat.3sg.past
 'I do not know if he ate up the apple.'

The same distribution is also characteristic of the BP, as seen from (19):

- (19) Ma ei tea, kas ta klouni ära mängis.
 I neg know if s/he clown.gen ptcl play.3sg.past
 'I do not know if he did play the clown.'

With these data, there is no evidence of a different distributional status of these two particles in terms of occurrence in front of a finite verb. The following data concern the differences.

6.2. The omission of objects

The omission of the object reveals a difference in well-formedness of the sentences between the CP and the BP. The object cannot be dropped in verb-CP combinations. The omission of the object results in ungrammatical sentences as in (20), (21):

- (20) Päike sulatas jääpurika ära.
 sun.nom melt.3sg.past icicle.gen ptcl
 'The sun melted the/an icicle.'

- (21) *Päike sulatas ära.
 sun.nom melt.3sg.past ptcl

The CP requires the presence of an object. The verb-BP combination always co-occurs with total objects if there is an object as in sentence (1). In contrast to CP-s, it is possible to omit the object from sentences with the BP. In many cases, what seems to be a difference between two particles may be simply a reflection of the opposition between an obligatory and optional argument. Therefore, it is necessary to study the combination of the BP with a predicate with an obligatory argument in sentence (21), which contains the verb *suudlema* 'kiss'.⁸

⁸ See the sentence (12) from section 3.2 for the description of a felicitous context.

- (22) Ta suudles (tüdruku) ära.
 s/he kiss.3sg.past girl.gen ptcl
 'S/he did the kissing (of a girl).'

The combination of the BP with a predicate with an obligatory argument allows omitting the object. There can be many accounts of this behavior, and some of the options may give a solution in a combined form. First option: the reason can be information structural. Discourse-old material is more likely to be omissible in many languages, and the theme argument here represents information that was introduced earlier. However, subsection 6.4 presents evidence that the typical referents of the objects in sentences with the CP are also discourse-old. Second option: certain thematic roles tolerate the omission of the material that carries those roles; patients are typically not omissible. However, there is (at least intuitively) no difference between the roles of the phrase 'girl' in a sentence with and without the particle in (22). In both cases, the phrase 'girl' represents a theme argument. Third option: the reason can be also that the theme argument is a kind of verb modifier in (22) — thus, not obligatory. In this case, it is not the particle that is the verb modifier, but the noun phrase 'girl'; the particle is a VP-modifier. Fourth option: the CP-verb combinations specify a measuring scale for an event lexically. That is, these combinations specify a participant in the event that provides a "single gradable parameter or scale along which the event transpires over time, and the endpoint of the scale" (Tenny 1994, 94). An example is the case with 'melt (up)', where the disappearance of the icicle corresponds to the transpiration of the event. Whether the physical extent of the participant (the icicle) itself provides this scale — as Tenny suggests — or a property of this participant (the volume of the icicle), as suggested by Hay et al. (1999), would take us beyond the scope of this study. However, it is important to note that the argument that stands for the participant that is related to the evolvment of the event in a particular way is not omissible. In contrast, the arguments that stand for participants that are not related to the evolvment of the event can be omitted. These speculations aside, tolerating the omission of the obligatory argument object reveals a clear difference between the verbal particles.

6.3. Omission of particles

This subsection will demonstrate that the two particles behave differently with regard to tolerating their omission from the sentence: the omission

of a CP still yields grammatical sentences with the total object even if the sentence becomes context-dependent; the omission of the BP can yield ungrammatical sentences with the total object, depending on the base verb class. In the case of many verbs without a built-in endpoint, such as the previously discussed *suudlema* 'kiss' in (22), the omission of the particle would lead to ungrammatical sentences (23) with the total object case, the object case must be partitive with this verb.

- (23) *Ta suudles tüdruku.
 s/he kiss.3sg.past girl.gen
 Intended meaning: 'She did the kissing of a girl.'

Ungrammaticality arises because the verbs that can combine with the BP and not with the CP lexically often do not contain any built-in endpoint; in the event in (23), the argument is not encompassed completely. If the event that the verb denotes is such that it can encompass an argument completely, the particle can be omitted as in (24). As discussed in section 4.1, the CP typically combines with such verbs.

- (24) Igaüks pidi kolm raamatut läbi lugema.
 everybody.(nom) must.3sg.past three.nom book.part through read.ma-inf
 'Everyone had to read through three books.'
 Kadri luges kaks raamatut Aasia kohta ja ühe
 K.(nom) read.3sg.past two.nom book.part Asia.gen about and one.gen
 raamatu Aafrikast.
 book.gen A.ela.
 'Kadri read two books about Asia and one book about Africa.'

The omission of the particles is possible with no effect on object case if there is an incremental theme base verb and the combination is transparent. However, it must be pointed out that the information structural properties of the sentences are different. As for opaque combinations, they do not tolerate the omission of particles for reasons of loss of the lexical meaning. In sum, the omission of a CP can yield grammatical sentences with the total object even if the sentence becomes context-dependent; the omission of the BP, depending on the base verb class, can yield ungrammatical sentences with the total object. The contrast between (22) and (23) indicates that the object case in combination with the BP is changed.

6.4. The participation of the particle in the information structure of the sentence

As described in Metslang (2001) and Rajandi–Metslang (1979), the position of the objects or obliques with regard to the CP reflects the organisation of the information structure as in (25), (26); the BP, being the only rhematic element in the sentence, has a fixed position and relates to only one information structural option. In sentence (25), where the particle in the stressed sentence-final position follows the unstressed total case marked object NP, the object represents known or old information. Metslang describes the aspect in this case as perfective.

- (25) Mari koristas toa ära.
 M.(nom) clean.3sg.past room.gen ptcl
 'Mari cleaned the room.'

In (26), the stressed particle precedes the total case marked object NP, and this sentence type is described as perfective, thus, the difference in word order does not result in any change in object case or aspect. The object conveys here introduced or new information according to Metslang, this information may be considered more specifically, **contrasted** in (26), that is, there is a choice between things to clean (up) and what Mary cleaned is a room.

- (26) Mari koristas ära toa.
 M.(nom) clean.3sg.past ptcl room.gen
 'Mari cleaned a/the room.'

In contrast, the BP does not function as an information structurer, that is, the object in the sentence cannot be contrasted. In the intransitive sentence (27), playing with cars belongs to the known, old information as something scheduled, planned and foreseen.

- (27) Mari mängis autodega ära.
 M.(nom) play.3sg.past car.pl.comit ptcl
 'Mari finished playing with the cars.'

In (28), the placement of 'the cars' in the position after the particle as new information yields a strange effect, since this verb can combine only with a BP and describe a scheduled, planned or foreseen event as involving the verb and the referents of its arguments.

- (28) ?Mari mängis ära autodega.
 M.(nom) play.3sg.past ptcl car.pl.comit
 'Mari finished playing with cars.'

And again, in a transitive sentence (29), clown-playing belongs to the earlier discourse as a part of the scheduled sequence of events.

- (29) Mari mängis klouni ära.
 M.(nom) play.3sg.past clown.gen ptcl
 'Mari finished playing the clown.'

In (30), the total case marked 'clown' appearing in the position associated with new information yields a strange effect.

- (30) ?Mari mängis ära klouni.
 M.(nom) play.3sg.past ptcl clown.gen
 'Mari finished playing a clown.'

There are many ways of understanding these data. One property of the CP is participation in organizing the information structure of the sentence. On the other hand, the BP does not display this ability since one cannot introduce the referents of the verb's arguments in a sentence with the BP. It is also possible that the case-marked 'clown' (29), (30) and 'cars' (27), (28) are verb modifiers, whereas 'room' is an object in (25), (26), as suggested in subsection 6.2 above. In that case, it is plausible that a verb modifier is positioned closer to the verb; the particle *ära* is in the last positioning the sentence. However, then it is difficult to understand the data in (18) and (19), which indicate that there is no distributional difference between the two particles in at least in some environments. In conclusion, the two particles have different distributional properties in some environments. The following section provides evidence that they enter morphological derivation differently.

6.5. No deverbal adjective formation with the BP

Deverbal participial adjective formation suggests that the two uses of the particles are also syntactically different. Deverbal (participial) adjective formation is only acceptable with CP-s. The combinations of particles and verbs, including *ära*-verb combinations, behave differently in adjectival participle formation as illustrated in the following examples. While it is possible to have sentences containing deverbal adjectives with

the CP as witnessed by (32), the combination is anomalous with the BP as evident from (31).⁹

- (31) #Ta pani ära küpsetatud koogi lauale.
 s/he.(nom) put.3sg.past BP bake.pass.ptcpl cake.gen table.all
 'S/he put the baked cake on the table.'

(32) with a CP serves to demonstrate that the particle *ära* as a form is an acceptable element in the deverbal adjective formation; therefore, there is again evidence for the distinction between CP and BP uses of the particle *ära*.

- (32) Ta pani ära lõhutud vaasi lauale.
 s/he.(nom) put.3sg.past CP break.pass.ptcpl vase.gen table.all
 'S/he put the broken vase on the table.'

There are several ways to understand the difference in the data about why a cake cannot be *ära küpsetatud*;¹⁰ it must be *valmis küpsetatud* 'baked ready'. These data may also indicate that these two particle types may have different structural characteristics; here follows a possible explanation. The BP does not combine with adjectives and nouns—but the CP doesn't either. In particle-participle combinations, thus, neither of these particles combines with an adjective. The difference is in the input of the derivation process. The CP as part of the verb enters the verb-based derivation and as a consequence, the CP that appears in the derivation does not modify the adjective and the formation is acceptable. The BP, being not a part of the verb, does not enter the morphological

⁹ This sentence, however, **definitely** needs embedding in the background context:

Kuidas tal lood selle koogiga on? Kas ta sai küpsetamisega hakkama?

'How are things with this cake? Did she manage the baking?/Did she manage to bake it?—

Jah, pärast pikka vaevanägemist küpsetas ta (selle) lõpuks siiski edukalt ära ja sai oma viie kätte.

'Yes, after a long struggle she did the baking of it successfully still and got her good mark.'

In the representation of particles and deverbal adjectives, there is also a normative issue of writing the particle separately or attaching it to the deverbal adjective, not discussed here. See Tauli (1972, 127–8) for further details.

¹⁰ It is possible to interpret the combination if baking is understood to affect a cake so that its crust becomes burned or too crispy, or if *ära* pertains to changing the relevant extent of it. Evoking those interpretations, however, requires extra processing as opposed to *valmis*.

verb-argument based derivation and as a consequence, in BP-participle combinations, the BP is left to modify an adjective. The outcome is not grammatical—the BP, as any other particle, cannot modify an adjective. Table 4 presents the difference in the derivations.

Table 4
Deverbal adjectives and the CP/BP distinction

CP	BP
<i>ära sulatatud jääpurikas</i> ‘the icicle that has melted’ <i>valmis küpsetatud kook</i> ‘the cake that has been baked (ready)’	<i>#ära küpsetatud kook</i> (baked cake) <i>#ära suudeldud tüdruk</i> (kissed girl) <i>#ära mängitud kloun</i> (played clown)

In sum, the issue of deverbal (participial) adjective formation calls for further research. It is an area where the two particles display a significant difference. On the basis of the information, the BP *ära*, in contrast to the CP-s, cannot be incorporated together with the verb in the course of this operation.

6.6. Summary

Many syntax-related differences indicate that there are uses of Estonian verbal particles that differ considerably. The BP and the CP are separable verbal particles that combine with verbs transparently, but the opacity of many CP-verb combinations (see section 5.2) may suggest that the CP is syntactically more closely related to the verb than the BP is.

7. Reasons for not considering the BP as completely grammaticalized

This section points out some reasons why, despite its distinct characteristics, the bounding perfective particle cannot be considered as firmly established in its function as an aspectual marker. The BP occurs only in spoken language. There is variation in judgments about the details concerning the verbs and contexts where the BP can occur. In borderline cases (verbs with an agent and a patient or theme, e.g., verbs of creation) there is uncertainty about the type of the perfective particle.

8. Conclusion

This article presented two grammaticalization types of separable perfective particles in Estonian. The bounding particle (BP) use of the semantically bleached separable verbal particle *ära* was demonstrated to display a distinct status in the grammaticalization of aspect. The special character of the BP was illustrated by contrasting the BP *ära*, on the one hand, with the well-established use of the particle with the same form (*ära*) and, on the other hand, with several other perfective particles, which are referred to here as instances of completive particles (CP). The study of differences brought out several novel facts about the BP. The particle occurs only in context-dependent, agentive sentences that typically describe the achievement of planned or foreseen endpoints of events. Perfective sentences with the BP contain primarily activity verbs; however, verbs in such sentences can belong to any of the aspectual classes, and the combinations are transparent. The occurrence of an argument that would serve as a “measure” for the event is thereby optional. The evidence that the BP–verb combinations do not allow for the derivation of adjectives (passive participles) also demonstrates the difference between the principles of combining a verb and a BP as opposed to a CP. The bounding perfective particle *ära* cannot be considered fully grammaticalized and established in its function as an aspectual marker, but it has developed its distinct semantic and syntactic character as opposed to the CP-s.

References

- Ackerman, Farrell – John Moore 2001. Proto-properties and grammatical encoding: a correspondence theory of argument selection. CSLI Publications, Stanford University.
- Dowty, David 1979. Word meaning in Montague Grammar. Dordrecht, Reidel.
- É. Kiss, Katalin 2004. Egy igekötőelmélet vázlatja [Outlines of a theory of the verbal particle]. In: Magyar Nyelv 100:15–43.
- Erelt, Mati 2003. Estonian language (Linguistica Uralica. Supplementary Series. Vol.1.). Eesti Teaduste Akadeemia Keele ja Kirjanduse Instituut, Tallinn.
- Erelt, Mati – Reet Kasik – Helle Metslang – Henno Rajandi – Kristiina Ross – Henn Saari – Kaja Tael – Silvi Vare 1993. Eesti Keele Grammatika II. Süntaks. Lisa: Kiri [The grammar of the Estonian language II. Syntax]. Eesti Teaduste Akadeemia Keele ja Kirjanduse Instituut, Tallinn.
- Hasselblatt, Cornelius 1990. Das Estnische Partikelverb als Lehnübersetzung aus dem Deutschen. Veröffentlichungen der Societas Uralo-Altaica, Wiesbaden.

- Hay, Jennifer – Christopher Kennedy – Beth Levin 1999. Scalar structure underlies telicity in “Degree Achievements”. In: T. Mathews – D. Strolovitch (eds): *SALT IX*, 127–44. CLC Publications, Ithaca.
- Hiietam, Katrin 2003. Definiteness and grammatical relations in Estonian. Doctoral dissertation, University of Manchester, Manchester.
- Kiefer, Ferenc 1992. Aspect and conceptual structure: the progressive and the perfective in Hungarian. In: Ilse Zimmermann – Anatoli Strigin (eds): *Fügungspotenzen*, 89–110. Akademie-Verlag, Berlin.
- Kiefer, Ferenc 2000. *Jelentélmélet [Semantic theory]*. Corvina, Budapest.
- Kiefer, Ferenc – László Honti 2003. Verbal “prefixation” in the Uralic languages. In: *Acta Linguistica Hungarica* 50:137–53.
- Kont, Karl 1963. Käändsõnaline objekt läänemeresoome keeltes [The declined object in Baltic Finnic languages]. ENSV Teaduste Akadeemia Keele ja Kirjanduse Instituudi uurimused IX, Tallinn.
- Krifka, Manfred 1992. Thematic relations as links between nominal reference and temporal constitution. In: Ivan Sag – Anna Szabolcsi (eds): *Lexical Matters*, 29–53. CSLI Publications, Stanford.
- Metslang, Helle 2001. On the developments of the Estonian aspect: the verbal particle *ära*. In: Östen Dahl – Maria Koptjevskaja-Tamm (eds): *The Circum-Baltic languages: their typology and contacts (Studies in Language Companion Series 55)*, 443–79. John Benjamins, Amsterdam & Philadelphia.
- Pusztay, János 1994. *Könyv az észt nyelvről [A book on Estonian] (Folia Estonica. Tomus III)*. Savariae, Szombathely.
- Rajandi, Henno – Helle Metslang 1979. Määramata ja määratud objekt [The nondefined and defined object]. ENSV Teaduste Akadeemia Keele ja Kirjanduse Instituut, Valgus, Tallinn.
- Rätsep, Huno 1978. Eesti keele lihtlausete tüübid [Types of Estonian simple sentences] (ENSV TA Emakeele Seltsi toimetised 12). Valgus, Tallinn.
- Tauli, Valter 1972. Eesti grammatika I. Hääliku-, vormi- ja sõnaõpetus [Estonian grammar. Phonology, morphology, and lexicology]. Institutionen för finsk-ugriska språk, Uppsala.
- Tenny, Carol 1994. Aspectual roles and the syntax–semantics interface (Studies in Linguistics and Philosophy 52). Kluwer Academic Publishers, Dordrecht.

Address of the author: Anne Tamm
 Research Institute for Linguistics
 Hungarian Academy of Sciences
 Benczúr utca 33.
 H-1068 Budapest
 anne_tamm@yahoo.com

FUNKTIONSWANDEL DEIKTISCHER STÄMME IM NGANASANISCHEN: GRAMMATIKALISIERUNG, LEXIKALISIERUNG, PRAGMATIKALISIERUNG

RÉKA ZAYZON

Auszug

Gegenstand der folgenden Arbeit ist die historische Entwicklung der nganasanischen Demonstrativa.

Bekanntlich unterliegt die Kategorie der Demonstrativa (der Raum-, Zeit-, und Objektdeixis) spezifischen Veränderungen, die durch ihre innere (funktional-semantische) und äussere (syntaktische) Struktur zu erklären sind. Schon seit den Anfängen der historischen Sprachwissenschaft hat man die besondere Rolle der pronominalen Kategorie insgesamt und insbesondere der Demonstrativa bei der Entstehung der primären Kasussuffixe erkannt, im Laufe einer langjährigen Forschungsgeschichte diente das Prinzip als Grundlage zahlreicher Rekonstruktionen. Eine systematische Zusammenfassung typischer Entwicklungslinien (Grammatikalisierungsketten) ist letztlich im Rahmen der Grammatikalisierungsforschung unternommen worden.

Die Zielsetzungen dieses Beitrags ist zweierlei: Einerseits werden Erkenntnisse der Grammatikalisierungsforschung auf das Nganasanische angewandt. (Dabei dient das Nganasanische weniger als Musterbeispiel für verschiedene Grammatikalisierungsketten, eher als mögliches Anwendungsfeld.) Als Ergebnis wird die Entwicklungslinie Ppron3Sg *siti* > Demonstrativ falsifiziert und einige zusätzliche Entwicklungslinien postuliert, so z. B. die der modalen Verwendungen der Demonstrativa, die in der uralistischen Literatur bislang wenig Beachtung fanden. Ferner werden terminologische Inkonsistenzen der Fachliteratur bei der Beschreibung einzelner Entwicklungslinien als Grammatikalisierung aufgezeigt.

1. Deiktische Morpheme waren schon seit den Anfängen der historischen Sprachwissenschaft Gegenstand des Forschungsinteresses und lieferten Musterbeispiele für das Phänomen, das später als Grammatikalisierung bezeichnet wurde. Auch in der seit einigen Jahrzehnten blühenden Grammatikalisierungsforschung spielt Deixis eine zentrale Rolle: Das Thema fehlt in keiner allgemeinen Darstellung, denn sie gilt als eine Kategorie, die auf idiosynkratische Weise grammatikalisiert wird und mehrfache Grammatikalisierungsketten aufweist. Da deiktische Elemente nahezu immer am Anfang eines Grammatikalisierungsprozesses stehen,¹ gelten sie

¹ Die herrschende Annahme, dass deiktische Elemente immer am Anfang der Grammatikalisierungskette stehen, wurde von Frajzyngier (1996) widerlegt. Er führte

als Sprachgenetisch ursprünglich und tauchen bezeichnenderweise in Spekulationen über den Ursprung der Sprache auf.

1.1. Gegenstand der folgenden, auf empirischem Sprachmaterial beruhenden Beschreibung sind Verwendungsweisen und die ihnen entsprechenden Funktionen von ursprünglich deiktischen Stämmen sowie deren Zusammensetzungen und Ableitungen in der nganasanischen Sprache.² Die Beschreibung dient dem Ziel, das funktionale und formale Potential³ der deiktischen Stämme, die die vielfältigen Funktionswandeln ermöglichen, aufzudecken, und aufzuzeigen, inwieweit diese Funktionswandeln mit der Begrifflichkeit der Grammatikalisierung zu erklären sind.

1.2. Die Abgrenzung der zu beschreibenden Phänomene erfolgt durch Ermittlung etymologisch zusammenhängender Lemmata in Wörterbüchern und Lexika. Ferner werden in der typologischen und uralistischen Fachliteratur bereits beschriebene Grammatikalisierungsketten sowie etymologische Fachliteratur herangezogen. Die Beschreibung beruht auf in der Samojedologie vereinzelt auffindbaren einschlägigen Ausführungen, die nach Möglichkeit ergänzt werden. Nach einer kritischen Anwendung des Begriffs Grammatikalisierung (**1.3**) wird der Kreis der durch ihn bezeichneten Phänomene umrissen. Schließlich werden Eigenheiten des nganasanischen Systems durch einen Vergleich mit den „klassischen“ Grammatikalisierungsketten aufgezeigt.

1.3. Der Begriff Grammatikalisierung bezeichnet einen komplexen Sprachwandel, der sich auf verschiedene sprachliche Ebenen auswirkt. Betroffen ist stets eine sprachliche Einheit der Größe mindestens eines Syntagmas, das in einem spezifischen Kontext von den Sprechern reinterpretiert wird. Dabei entwickelt sich ein Element (ein Lexem oder ein gebundenes Morphem) des reanalysierten Segments zu einem grammatischen Morphem. Dies geht einher mit

Beispiele aus dem Chadischen dafür an, dass auch Raumdeixis sekundär, d.h. hier im Laufe eines Lexikalisierungsprozesses, entstehen könne. Üblich ist jedoch die Entstehungsweise von Personendeixis aus Symbolfeldausdrücken, siehe hierzu Punkt 2.1.1 und Róna-Tas (1976).

² Für eine einführende Beschreibung der nganasanischen Sprache s. Helimski (1998), Tereščenko (1979).

³ Im Sinne von Redder (1990, 3–6).

- (a) semantischer Entleerung und Zunahme an grammatischer Bedeutung
- (b) zunehmender syntaktischer oder morphologischer Fixierung
- (c) Abschwächung oder Kürzung des Lautbildes

des betroffenen Elements.

Mit der Erweiterung der Forschung im Bereich der Grammatikalisierung wurde der Begriff immer weiter präzisiert. Zunächst wurde der Begriff Lexikalisierung hinzugefügt, um solche Sprachwandelphänomene, an deren Ende eine Erweiterung des Lexikons steht, von der Grammatikalisierung abzugrenzen. Es ist leicht einzusehen, dass es bei dem Begriff Grammatikalisierung Grauzonen und unterschiedliche Meinungen allein schon deswegen geben muss, weil auch der Begriff der Grammatik und somit der grammatischen Bedeutung kein diskret abgrenzbares Konzept darstellen.⁴

In der Fachliteratur werden unter dem Begriff der Grammatikalisierung schließlich auch Sprachwandelphänomene beschrieben, die eine Entwicklung hin zu einer pragmatischen Funktion darstellen (z.B. der Diskurspartikeln — Fernandez-Vest 2000), deren Erfassung weder der Grammatik noch dem Lexikon zusteht. Terminologisch konsequent wäre es, solche Entwicklungen nicht als Grammatikalisierung zu bezeichnen.

1.4. Bedingt durch ihre idiosynkratische innere und äußere Struktur unterliegen deiktische Morpheme regelhaftem Wandel. Dies wird bei etymologischen Rekonstruktionen vorausgesetzt, die Regeln des funktionalen Wandels werden jedoch selten explizit formuliert.⁵

Zur systematischen Ausformulierung der entsprechenden Regeln kam es in der Grammatikalisierungsforschung. Die „klassischen“ Grammatikalisierungsketten von Demonstrativa, wie sie bei Lehmann (1995, 55) beschrieben werden, wurden im Laufe der Forschung nach und nach ergänzt.

⁴ „Speculation of this kind should warn us that our definition of grammar can only be as trustworthy as our apprehension of the notion of grammar. But the study of grammar itself has revealed no clear boundaries to the concept of grammar. Rather, grammatical phenomena have fuzzy borders and are always changing. Grammar itself is the product of linguists' reflection on language, and thus represents a consensus about appropriate objects of inquiry rather than a sharply delineated, definable entity“ (Ramât-Hopper 1998, 4).

⁵ So findet sich z.B. bei Closs Traugott (2002) kein Hinweis hierauf.

Die bislang umfassendste mir bekannte Liste, die aus Diessels einschlägiger Monographie stammt (Diessel 1999a), kann ebenfalls durch einige Angaben ergänzt werden.⁶

Im folgenden soll eine Auflistung der in der einschlägigen Forschungsliteratur beschriebenen (im Einzelfall hypothetischen) Grammatikalisierungsketten deiktischer Morpheme stehen:⁷

- Demonstrativpronomen > Personalpronomen > Personalsuffix > determinierendes Suffix;
- Demonstrativpronomen/anaphorisches Pronomen > Personalpronomen 3sg > Relativpronomen/Konnektiv;
- Demonstrativpronomen > Determinans mit abgeschwächt demonstrativem Charakter > Determinans > Artikel > Suffix der nominalen Klasse (Lehmann 1995, 55);
- Demonstrativpronomen > Personalpronomen > Px in determinativen Funktion > weitere Suffixe mit determinativem Charakter (z.B. das Akkusativsuffix, vgl. Mikola (1965), das Prädestinativsuffix vgl. Künnap 1987; Janhunen 1989);
- konkrete Lokalisierung > Possessivrelation (*habeo*-Konstruktion und Existentialsatz) (Heine 1992)
- > *expletive particle* (fr. *c'est toi que je connais*) (Diessel 1999b);
- > Satzkonnektor (ebd.);
- > Converb; Verbalpräfix (ebd.);
- > Fokus- und Topikmarker (ebd.);
- > Lokalkasussuffix;
- > Tempuszeichen (Heine-Kuteva 2002);
- > Ordnungszahl (? fi. *ensi, toinen* — Rédei 1988–1991, Itkonen-Kulonen 1992–2000);
- > Evidentialsuffix (Willett 1988, 80);
- > Modal- und Diskurspartikel (Himmelmann 1997; Abraham 1991; Fernandez-Vest 2000)

⁶ Das *World Lexicon of Grammaticalization* (Heine-Kuteva 2002), obwohl nach Diessel entstanden, ist in der Behandlung der Deiktika äußerst knapp.

⁷ Die Liste dient der möglichst erschöpfenden Erfassung postulierter Richtungen funktionalen Wandels deiktischer Elemente. Einige der angeführten Funktionsverschiebungen sind umstritten — dies wurde mit einem Fragezeichen gekennzeichnet —, es geht in dieser Arbeit jedoch in erster Linie nicht um die Richtigkeit der einzelnen Daten, sondern darum, dass die angenommenen Grammatikalisierungsketten als zumindest möglich gelten.

Wie aus der Liste hervorgeht, wurden in der uralistischen Literatur, ohne den Terminus Grammatikalisierung zu verwenden, Zusammenhänge zwischen Demonstrativpronomina und Determination (Akkusativsuffix im Ungarischen, Prädestinativsuffix im Nord-Samojedischen, Translativsuffix im Ostseefinnischen) sowie indexikalischen Ausdrücken ('vorne', 'drüben', fi. Ordnungszahl *ensi*) bereits postuliert. Die folgende Beschreibung knüpft an einige Ergebnisse aus diesem Bereich an.

1.5. Das Korpus, auf dem folgende Beschreibung beruht, bilden die von Kazis Labanauskas herausgegebene Textsammlung (Labanauskas 2001), sowie die in der *Chrestomathia Nganasanica* (Wagner-Nagy 2003) publizierten Texte. Die meisten Aufzeichnungen stammen aus den 1970-er Jahren, die neuesten sind in den letzten 10 Jahren verfasst worden, sodass das Korpus diachron gesehen als ein Idiom betrachtet werden kann. Im Falle von Sprachen mit einer langen schriftlichen Tradition lassen sich die einzelnen Stadien von Grammatikalisierungsprozessen verfolgen und die der Reanalyse zugrunde liegenden Kontexte erfassen und datieren — dies ist anhand des vorliegenden Korpus aufgrund des relativ kurzen Zeitraumes, aus dem die Texte stammen, jedoch kaum möglich. So stützt sich die folgende Beschreibung auf Rekonstruktionen aufgrund von synchron ermitteltem Sprachmaterial, indem sie sich der Methoden der historisch-vergleichenden Sprachwissenschaft bedient. Ergänzt wird die Methodik durch Erkenntnisse pragmatisch-funktionaler Ansätze.

2. Die deiktischen Stämme im Nganasanischen

Aus funktionaler Sicht verfügt das Nganasanische über ein dreigliedriges Paradigma. Es unterscheidet zwischen proximaler, medialer und distaler Deixis (Tabelle 1).

Die proximalen Formen werden von dem Stamm $\mathfrak{m}(\mathfrak{a})$ - gebildet. Janhunen führt diesen Stamm auf PS $*\mathfrak{ä}m$ - ($*\mathfrak{m}$) zurück, den er als eine Ableitung des Demonstrativstamms \mathfrak{a} < PS $*\mathfrak{ä}$ - ($\sim *e \sim *a$) erklärt (Janhunen 1977, 19). Das Ableitungsmorphem $-m(\mathfrak{a})$ ist möglicherweise der Reflex des uralischen Pronominalbildungssuffixes $*-m\mathfrak{a}$ (Majtinskaja 1974, §381).⁸

⁸ Jedoch erwähnt Majtinskaja unter den Reflexen von $*m\mathfrak{a}$ lediglich Beispiele aus dem finnisch-ugrischen Zweig, nämlich aus dem Ostseefinnischen und Obugrischen.

Tabelle 1

Paradigmen der nganasanischen Demonstrativformen

	proximal <i>əm(ə)-</i>	medial/anaphorisch <i>tə-</i>	distal <i>tam-</i>	
Abs	<i>əmə</i>	<i>tə</i>	<i>takə</i>	
Abs (Präsentativ)	<i>əmənīə ~ əməñīə</i>	—	<i>taənīə</i>	
Attr Abs	<i>əmti(rə)</i>	<i>təti(rə)</i>	—	
Adj	<i>əmləd 'i ~ əbləd 'i</i>	<i>tərləd 'i</i>	—	
Adv	<i>(ə)mī 'ia</i>	<i>təñi 'ia/ təni</i>	—	
Lat	<i>(ə)mī 'ia ~ əməñi/əməd 'a</i>	<i>təndə</i>	<i>təñi 'ia/təni</i>	<i>tabə</i> <i>taba 'a</i>
Loc	<i>əmnī</i>	<i>tənu/təñi</i>	<i>təñini</i>	<i>tamnu ~ tamnī</i>
El	<i>əmkətə</i>	<i>təgətə</i>	<i>təñiḁə</i>	<i>tamkətə</i>
Prol	<i>əməənī</i>	<i>təməənī</i>	<i>təñiməənī</i>	<i>taməənu</i>

Janhunens Rekonstruktion beruht auf den Angaben Castrén (1854/1969). In dessen Aufzeichnungen aus den 1840-er Jahren finden wir die Wortfamilie in der Form mit einem prothetischen *η-*, bei Castrén *~*: *~ama*, *~amaη*, *~amanie*, etc. Die *η*-Prothese hat im Nganasanischen das anlautende PS *ä-* aufgelöst. Diese Prothese wurde jedoch bei allen anderen Wörtern, die bei Castrén mit anlautendem *η-* belegt sind, bewahrt — mit Ausnahme des Demonstrativstammes *əm(ə)-* (Tabelle 2).

Tabelle 2

PS	Castrén	heute	Bedeutung
<i>*äm (*əm-)</i>	<i>~ama</i>	<i>əmə</i>	'dieser'
<i>ämāj</i>	<i>~ameai</i>	<i>ηamīaj</i>	'anderer'
—	<i>~āmu</i>	<i>ηəmu</i>	'Tabak'
<i>äm (*əm-)+*-tV</i>	<i>~amti</i>	<i>əmti</i>	'dieser'
<i>ämṭə</i>	<i>~amta</i>	<i>ηamtə</i>	'Horn'

Im heutigen Nganasanisch kommt *ə-* im Wortanlaut selten vor. Abgesehen von drei Diskurs-partikeln die onomatopoetischen Ursprungs oder spätere Entlehnungen sein können und daher eine unregelmäßige Entwicklung aufweisen und dem Demonstrativstamm *əm(ə)-* gibt es im Nganasanischen heute nur vier Morpheme mit einem *ə* im Anlaut. Die Entwicklung des Demonstrativstammes bildet auch in dieser Wortgruppe eine Ausnahme: Es gibt keine weiteren Beispiele dafür, dass prothetisches

η - getilgt wird. In zwei Fällen geht anlautendes ϑ - auf einen Vokal zurück, die anderen beiden sind bei Castrén nicht belegt (Tabelle 3).

Tabelle 3

Castrén	heute	Bedeutung
<i>iji'a</i> , Augm. von <i>isi</i> 'älterer Bruder' oder <i>Asa</i> , pl. <i>Aija</i> 'Tunguse, Dolgane, eig. jüngerer Bruder'	$\vartheta'a$	1. 'älterer Bruder'; 2. 'Onkel (jüngerer Bruder des Vaters)'
<i>atea</i>	<i>atja</i>	'Pflicht, Schuld'
—	<i>aliga'a</i>	1. 'Schaden, Nachteil'; 2. 'schlecht, unanständig'
—	<i>arəkarə</i>	'schön, wunderbar'

Anhand der Belege — und wenn man von der Richtigkeit der Castrénschen Aufzeichnungen ausgeht — muss man annehmen, dass die Wortfamilie des nganasanischen proximalen Demonstrativums $\vartheta m(\vartheta)$ - eine formelle Anomalie aufweist. Es ist bislang ungeklärt, warum das protetische η - dieses Morphems wieder getilgt wurde.

Somit bleibt auch unsicher, ob das Vorderglied des nganasanischen ϑm - tatsächlich bis auf das Uralische zurückgeht,⁹ eine typologische Parallele zu vokalischem anlautenden Demonstrativa in weiteren uralischen Sprachen bildet oder eine Entlehnung ist.

Die beiden *t*-Stämme: den anaphorischen Stamm *tə(-)* (bei Castrén *ta*- S. 594) und den distalen *tam*- (ebenso bei Castrén ebd.) führt Janhunen auf zwei protosamojedische Formen zurück, nämlich auf PS $*t\hat{a}(-)$, bzw. PS $*t\ddot{a}(-) \sim *te(-)$ (Janhunen 1977).

Der *tə*-Stamm weist zwei Kasusparadigmata auf: Zusätzlich zur nominalen Bildungsweise, der der absolute Stamm zugrunde liegt, gibt es ein adverbiales Paradigma, das aus dem durch das Lokalkasussuffix erweiterten Stamm *təni*- gebildet wird.

Im distalen Paradigma gibt es die beiden Stammmorphemvarianten *ta(a)*- und *tam*-. Die Stammvariante *tam*- kommt nur in den sekundären Casusformen vor, eine adjektivische oder modale Form (Aspektdeixis) weist das Paradigma nicht auf. Es stellt sich die Frage, in welchem Verhältnis diese beiden Morphemvarianten zueinander stehen: Gehören sie historisch zusammen, ist die längere eine Ableitung aus der kürzeren? Die längere Stammvariante ist laut Janhunen eine Ableitung des Demonstra-

⁹ Wenn Janhunens Etymologie richtig ist, und Nganasanisch $\vartheta m\vartheta$ ein Reflex des PS $*\ddot{a}$ - (? $\sim *e$ - $\sim *a$ -) ist, dann kann die Rekonstruktion aufgrund der Angaben von Rédei (1988–1991) bis zum Uralischen zurückgeführt werden.

tivstamms **tā* durch das oben bereits erwähnte Suffix *-m*, die auf das PS, oder möglicherweise auf das Uralische **-mā* zurückgeht.

Castrén belegt die Form des präsentativen Demonstrativs mit kurzem *a* als *tanie*¹⁰ und ordnet es sowohl phonologisch als auch semantisch ('jener, der bekannte, Lat. *ille*') unter dem Stamm *ta-* ein (a.a.O. S. 358).¹¹ Auffällig ist auch, dass die heute belegte Form *taanio* wegen Fehlens der medialen Form in binärer Opposition zu dem proximalen *əmanio* steht. Dies spricht auch dafür, dass Castréns Schreibweise korrekt ist und die Form *taanio* etymologisch mit dem medialen Demonstrativstamm zusammenhängt. Die Dehnung des Vokals bleibt ungeklärt, vermutlich erfolgte sie aufgrund von Analogiewirkung durch das distale Paradigma.

Die Form *takəə* ist möglicherweise sekundär aus dem Symbolfeldausdruck U *taka-* 'Hinterraum, das hintere' (Rédei 1988–1991, 506–7), PS **tākā* 'das Hintere' entstanden (Janhunen 1977, 154), erweitert durch das Adjektivbildungssuffix *-ə*. Die ursprüngliche Bedeutung des distalen Demonstrativums ist 'das hintere, das hinten befindliche'. Die Form ist im heutigen Nganasanisch auch in der ursprünglichen Bedeutung belegt.

Da die Ableitung *takəə* möglicherweise bereits im Uralischen stattgefunden hat, und die Form *taanio* — wie oben gezeigt — auf den medialen Stamm zurückgeht, kann man feststellen, dass im Nganasanischen die distalen Demonstrativa sekundär entstanden sind und dass die heutigen Formen der nganasanischen Demonstrativa etymologisch auf zwei Stämme zurückgeführt werden können.

Synchron betrachtet kann man hingegen drei funktionale Gruppen der nganasanischen Demonstrativa unterscheiden. Während der medial-anaphorische Stamm *tə-* ausschließlich im Textraum angesiedelt ist und der Fokuskontinuierung dient, werden die proximalen und distalen Formen exophorisch oder am Phantasma verwendet. Die proximale Form kann auch ana- und katadeiktisch verwendet werden, und ist das sprachliche Mittel der Neufokussierung.¹²

¹⁰ Dagegen bezeichnet Castrén die langen Vokale mit *ā* (a.a.O. S. 3).

¹¹ An gleicher Stelle erwähnt Castrén, dass „*amang*, *tanie* im attributiven Verhältnis mit *amte*, *tati* vertauscht zu werden pflegen.“

¹² Zu den Begriffen Fokuskontinuierung und Neufokussierung s. Ehlich (1982).

2.1. Die Grammatikalisierungskette anaphorisches Pronomen → Personendeixis → Personalsuffix → Determinans

2.1.1. Anaphorisches Pronomen → Px3sg

Der wesentliche funktionale Unterschied zwischen Personaldeixis (Personalpronomina der 1. und der 2. Person) und Objektdeixis (Personalpronomen der 3. Person) schlägt sich auch in der lexikalischen Form und auf der morphosyntaktischen Ebene nieder.¹³

Die formale Ähnlichkeit zwischen Pronomina der dritten Person und anaphorischen bzw. deiktischen Pronomina¹⁴ liegt in der funktionalen Affinität der beiden Kategorien begründet. In der uralischen Fachliteratur geht man davon aus, daß das protouralische Personalpronomen der dritten Person, rekonstruiert in der Form **s₃*, auf ein anaphorisches Pronomen zurückgeht. Die beiden Formen dürften sich jedoch bereits im Protouralischen voneinander unterschieden haben; so bleibt die Annahme, obwohl wahrscheinlich, dennoch hypothetisch (Hajdú–Domokos 1987, 218). Ebenso hypothetisch sind auch die Annahmen über den Zusammenhang zwischen Personaldeixis und Raumdeixis allgemein (ebd.).

Auch das nganasanische Personalpronomen der dritten Person *sit̪i* wird auf ein anaphorisches Pronomen zurückgeführt. Es wird mit folgenden Reflexen in Zusammenhang gebracht: ens. *sedeo* 'der, jener', kam. *šē* 'der dort' / ostjV *t̪i*, O *ši* 'id.'; tscher. *sedə* 'der, jener'; mord. *še* 'jener, dieser da'; fi. *se* : *si-* 'es, jener, der' (Majtinskaja 1974, 284; Collinder 1965; Janhunen 1981, 269; Rédei 1988–1991, 34; Hajdú 1990, 3; Itkonen–Kulonen 1992–2000, 163).

Obwohl die Zugehörigkeit einiger Reflexe — so des Tscheremissischen (Collinder 1965; Rédei 1988–1991; Hajdú 1990; Itkonen–Kulonen 1992–

¹³ So besteht z. B. im ungarischen pronominalen System bei den ersten beiden Personen eine lexikalische Opposition zwischen Singular- und Pluralformen (*én* : *mi*, *te* : *ti*), die Pluralform der 3. Person wird jedoch „regelmäßig“, d. h. hier analytisch nach dem nominalen Paradigma gebildet (*ő* : *ők*). Im Estnischen zeichnen sich die Pronomina der dritten Person durch das suppletive Paradigma *tema* : *nema* aus. Zudem existieren — wenn auch vereinzelt — pronominale Systeme, in denen die lexikalische Form des Pronomens der ersten Person zu denen der zweiten und dritten Person in Opposition zu setzen ist. Letztere sind jedoch in der Regel sekundäre Formen, die auf einen Nominalstamm mit lexikalischer Bedeutung zurückgehen, wie z. B. im Nenzischen, wo die Pronomina der zweiten und dritten Person auf das Nomen *nydo* 'Körper' zurückgehen (Sebestyén 1964).

¹⁴ Zum Funktionswandel 'dies > er' vgl. estn. *tema*, tscher. *tušo*, fi. *se*, fr. *il* < lat. **ille* 'der, dieser', got. *is*, ahd. *er* — lat. *is* 'der, dieser' (Hajdú–Domokos 1987, 218).

2000) und des Kamassischen (Collinder 1965; Rédei 1988–1991; Itkonen–Kulonen 1992–2000) — häufig angezweifelt wurde, hielt man an der bis zur uralischen Grundsprache zurückgehenden Etymologie fest.¹⁵ Lediglich über die Qualität des anlautenden Konsonanten wurde debattiert: Setälä (1902, 268–9) und ihm folgend Janhunen (1981, 51) rekonstruieren einen palatalen Spiranten (*ś), wogegen Paasonen (1906, 211) und Rédei (1988–1991) von einer Affrikate (*č) ausgehen.

Für das Protosamojedische wird die Form *se rekonstruiert. Da jedoch das kamassische anlautende š- regelmäßig auf PS *k- zurückgeht (Sammallahti 1988, 498), gehört kam. šē 'der dort' nicht in diese Zusammenstellung.ENZISCH *sedeo* ist wegen seiner Bedeutung 'der vorherige' kein sicheres Glied der Etymologie. Zieht man die Konsequenzen aus den lautlichen und semantischen Unregelmäßigkeiten, und schließt man die nicht zugehörigen Formen von der Zusammenstellung aus, bleibt auf der samojedischen Seite allein nganasanisch *siti*. Wie aus folgender Tabelle hervorgeht, kann man die Urform des nordsamojedischen Personalpronomens der dritten Person wegen fehlender Entsprechungen im Nenzischen und Enzischen nicht rekonstruieren.

Tabelle 4

Personalpronomina der 3. Person in den samojedischen Sprachen

		sg.	du.	pl.
NSam	Nganasanisch	(C) <i>sete</i> / <i>siti</i>	(C) <i>seti</i> / <i>siti</i>	(C) <i>seteŋ</i> / <i>sitiŋ</i>
	Nenzisch	[sekundär]	[...]	[...]
	Enzisch	[...]	[...]	[...]
SSam	Selkupisch	<i>təp</i>	<i>təpāqi</i>	<i>təpiŋ</i>
	Kamassisch	<i>teo</i> , <i>di</i>	<i>dišide</i>	<i>dizen</i>
	Matorisch	<i>ti</i> (? <i>tin</i>)		<i>ti</i> (? <i>tin</i>)

Quellen: Vértés (1967), Wagner-Nagy (2003), Helimski (1997, 147)

Wenn man der Rekonstruktion der gemeinsamojedischen Form jedoch die südsamojedischen Formen zugrunde legt, ergibt sich die Form *tv-, von der aber nganasanisch *siti* nicht abgeleitet werden kann, denn die Fortsetzung von PS *t*- im Nganasanischen ist *t*- oder *t̃*- [č].

¹⁵ Allein bei Janhunen wird die Zurückführung bis zum Uralischen in Frage gestellt, jedoch nicht für das Samojedische: Nganasanisch *siti* gilt als sichere Fortsetzung des Demonstrativpronomens, nicht jedoch finnisch-permisch ?*śä (Janhunen 1981, 51).

- (9) Iga päev käis Mari jooksmas,
 every day go.3sg.past M.(nom) run.mas-inf
 pärast jooksmist läks bussiga ujuma.
 after running.part go.3sg.past bus.comit swim.ma-inf
 'Every day, Mari went running, after running she took the bus and went swimming.'
- Täna juhtus aga nii.
 today happen.3sg.past but so
 'But what happened today was...'
- Mari jooksis ära,
 M.nom run.3sg.past ptcl
 'Mari did the running...'
- ent kuna millegipärast busse ei käinud,
 but since for some reason bus.part.pl neg go.act.ptcpl
 siis ei saanud ta ujuma minna.
 then neg can.act.ptcpl s/he swim.ma-inf go.da-inf
 '... but as the buses did not run/work for some reason, she could not go swimming.'

Here, the sentence (9) conveys that Mari spent (running) the span of time or distance she used to run every morning and then failed to start another intended activity that belongs to the conventional sequence of activities performed by her daily. This example resembles an example of Dowty (1979, 61), where *John swam* can have a telic interpretation in a context where John is known to swim a set distance every day — but it may be a set time as well. The next example (10) contains an intransitive activity verb *tegelema* 'be busy with something, deal with, be occupied with, work on something', a verb with no built-in endpoint or culmination.

- (10) Kas lähme õue?
 question particle go.1.pl out
 'Shall we go out?'
- Ei, vaata, laps tegeleb praegu nii kenasti voolimisega.
 no look child.nom deal.3sg now so nicely modeling.comit
 'No, look, the child is so well busy with modeling.'
- Olgu, las ta siis tegeleb ära ja lähme siis.
 ok let s/he then deal.3sg ptcl and go.1pl then
 'That's fine, let's go then as soon as s/he's done with his/her modeling.'

The particle does not confirm or specify any natural endpoint as entailed or implicated by the verb's meaning. The meaning of the verb *tegelema* 'be busy with something, deal with, be occupied with, work on something'

does not contain any natural endpoint. Without the contribution of the particle, the activity as described by this verb would be described as going on endlessly. The sentence in (10) conveys that the endpoint or boundary of the activity co-occurs with the moment when the child decides s/he's done with her modeling and at a certain moment, stops the activity. Compared to the example (9) with running, this example clearly indicates that the particle use is not dependent on a predefined set distance.

The next example (11) contains a verb with a built-in endpoint, *tutvuma* 'get acquainted with'.

- (11) Mari tutvus materjaliga/(?)Katiga ära ja jalutas minema.
 M.nom get-acquainted material/K.comit ptcl and walked away.
 'Mari did the getting acquainted with the material/Kate and then walked away.'

This sentence describes that Mari had to or intended to be engaged in the activity of getting acquainted with the material or Kati and then walked away.⁵ The activity is more likely than not scheduled in between other activities or tasks and the use of *ära* can implicate that the "proper" result was not attained. The sentence can be also interpreted as having the result, the natural endpoint as described by the verb, where Mari is acquainted with Kati or the material.

Although the BP generally co-occurs with intransitive verbs, it is not impossible with transitive verbs either. Changing from intransitives to transitives, I will consider first simple activity verbs such as *suudlema* 'kiss', discussed in Metslang (2001). Activity verbs combine with the BP as illustrated in (12).

- (12) Ta suudles tüdruku ära.
 s/he kiss.3sg.past girl.gen ptcl
 'S/he did the kissing of a girl.'

Metslang (2001) describes this sentence as having a context where one has made a bet to kiss the girl. The result, attaining what is required by the conditions of the bet, is introduced into the sentence by the particle.

The particle *ära* (as opposed to the lexically determined CP combinations *valmis* 'ready' or *läbi* 'through') is an instance of the bounding particle also when it appears with transitive, creation verbs such as

⁵ The sentence with "material" is slightly more acceptable than that with "Kate". I am grateful to Ferenc Kiefer for pointing out the aspectually different nature of this verb with animate vs. inanimate complements cross-linguistically.

Es finden sich auch innersprachlich keine Formen, die mit *siti* etymologisch zusammenhängt. Daher stellt sich die Frage, ob ein anaphorisches Demonstrativpronomen in einer Sprache keine weitere Spur hinterlassen haben kann. Man denke an das finnische anaphorische Pronomen *se*, das im kolloquialen Gebrauch in der Rolle des Personalpronomens der dritten Person geläufig ist — also durchaus vergleichbar mit dem vermuteten Entwicklungsszenario von *siti* — und ein vollständiges Kasusparadigma (*se*, *sen*, *sitä*, *siihen* etc.) sowie andere Derivate (*siksi*, *sekä... että...*) aufweist. Aus lautlichen Gründen und mangels innersprachlicher und samojedischer Entsprechungen scheint somit die Herleitung von *siti* aus dem anaphorischen Pronomen unwahrscheinlich.

Eine Alternative bietet Helimskis Etymologie.¹⁶ Demnach gehört nganasanisch *siti* aufgrund regelmäßiger Lautentsprechungen mit folgenden Pronominalstämmen zusammen: dem Genitiv- und Akkusativstamm der Personalpronomina im Nenzischen und Enzischen sowie dem Akkusativstamm der Personalpronomina der 1. und 2. Person im Selkupischen (Janhunen 1977, 70–1, Helimski 1982, 90–3). Die genannten Reflexe gehen auf NSam. **kit^l* (PSam. **ki*) bzw. U **ke* 'Ähnlichkeit, Bild' zurück. Hierher gehört auch die nganasanische Modalpartikel *sīliaδə*, *sīlia* 'it is not clear whether, I don't know' < **kit^l-only-for* (Helimski 2003) (etwa 'nur zur Ähnlichkeit'). Möglicherweise geht auch das nganasanische Interrogativpronomen *sili* 'wer' auf denselben Stamm zurück, unklar ist hier jedoch die Endung *-li* ? < *-ri*.

Im Nganasanischen wurde das Wort in gleicher Lautform *sī* : *siti* zudem auch in der ursprünglichen Bedeutung bewahrt (Kosterkina et al. 2001, 159). Die genannten Reflexe gehören zur Gruppe derjenigen Pronomina und Abstrakta, die sich durch semantische Entleerung aus Nomina mit konkreter Bedeutung entwickelt haben.

2.1.2. Personalpronomen → Personalsuffix?

Wenn auch die Grammatikalisierungskette *anaphorisches Pronomen* → *Personalpronomen der 3. Person sg.* für das Nganasanische nicht durch die Etymologie der heutigen pronominalen Form bewiesen werden kann, so scheint es doch Hinweise auf eine entsprechende Entwicklung zu geben.

¹⁶ Vorgestellt im Rahmen des 4. Uralischen Workshops von Budapest (BUM IV). Die folgende Darstellung beruht auf der dort präsentierten Tischvorlage.

Tabelle 5

Nganasanische Personalsuffixe, die ein Segment *-tV-* enthalten

	sg.N/du.,pl.NGA; obj./sg.	sg.A	adv./sonst.
3sg.:	-TU	-MTU	-NTU
3du.:	-TI ^c	-MTI ^c	-NTI ^c
3pl.:	-TU _η	-MTU _η	-NTU _η

In der überwiegenden Zahl der Personalsuffixparadigmen kann man für die dritte Person ein Segment *-tU-* (*-tu/-t_i*) unterscheiden, das dem Lautbild des Demonstrativpronomens sehr nahe steht, wenn auch nicht identisch mit diesem ist. Das Personalsuffix geht auf protosamojedisch **-tA* (< uralisch **-sA*) zurück (Mikola 1988, 240; Helimski 1997, 142), und unterscheidet sich daher nicht nur im Konsonantismus, sondern auch im Vokalismus von den Demonstrativstämmen: sowohl vom anaphorischen Pronomen PS **tš(-)*, als auch vom distalen Demonstrativpronomen PS **tä(-) ~ *te(-)*. Dass das uralische Personalpronomen der 3. Person sg. **sə* auf einen Demonstrativstamm zurückgeht bleibt also eine Vermutung, während die Verbindung zwischen dem Personalsuffix **-sA* und dem Personalpronomen **sə* sehr wahrscheinlich zu sein scheint. Im Samojedischen oder in einer früheren Sprachstufe wurde das ehemalige Personalpronomen der 3. Person U **sə* zum Personalsuffix agglutiniert. In einer späteren Sprachstufe wurde das Personalpronomen durch eine periphrastische Form mit der Bedeutung 'sein Bild, sein Antlitz' ersetzt (S. 2.1.1).

Tabelle 6

	PU	PS	Ngan
Demonstrativpronomen	<i>*če ~ č_i</i>	<i>*tš(-)</i>	<i>tə(-)</i>
Personalpronomen 3sg	<i>*sə</i>	? (SSam <i>*tv</i>)	—
Personalsuffix 3sg	<i>*-sA</i>	<i>*-tA</i>	<i>-tU-</i> (<i>-tu/-t_i</i>)

2.1.3. Personalsuffix (Px2sg, Px3sg) > determinierendes Suffix

Das Nganasanische hat keinen bestimmten Artikel. In determinativer Funktion werden die Possessivsuffixe der zweiten und dritten Person verwendet. Da ein Possessivsuffix stets ein bestimmtes Relationsverhältnis ausdrückt, identifiziert es eindeutig die Referenz seines Bezugswortes. Diese Leistung macht es möglich, dass dieses Suffix auch auf Kontexte übertragen werden kann, in denen es allgemein um Determination geht.

Die Allomorphe der proximalen und medial-anaphorischen Pronomina des Nganasanischen *əmə*, *əmti*, *əmtirə* bzw. *təə*, *təti*, *tətirə* sind

zweimal in der Folge durch Possessivsuffixe erweitert worden. In der Endung der Form *tati* identifiziert man das Possessivsuffix der 3. Person *-ti*, zu dem nach der semantischen Entleerung des Suffixes ein weiteres determinierendes Element, nämlich das Possessivsuffix der zweiten Person *-ra* hinzugefügt wurde (Wagner-Nagy 2003, 97).

Dagegen schlägt Helinski (mündliche Mitteilung) eine andere Erklärung vor, die der abweichenden genitivischen Form *təndə* Rechnung trägt. Er hält eine Formbildung durch Reduplikation für möglich, wobei aus der ursprünglich reduplizierten genitivischen Form *tən-tən* die heutige Form *təndə* nach der Auslautreduktion und der Stimmhaftwerdung von *t-* nach dem nasalen *-n* regelmäßig entstanden ist. Das Reduplikationsprinzip läßt sich jedoch nicht auf die Ableitungen von *əmə-* übertragen. Führt man beide Erklärungen zusammen, kann man annehmen, dass zunächst der anaphorisch gebrauchte Stamm durch Reduplikation erweitert wurde. Die reduzierte Form wurde als Possessivsuffix reinterpretiert (da Possessivsuffixe in determinativem Gebrauch durchaus geläufig sind, erscheint die Reinterpretation möglich) und mit der Zeit auf die proximalen Formen übertragen.

2.1.4. Demonstrativpronomen > Determinans abgeschwächt demonstrativen Charakters

In nganasanischen Texten neueren Datums, die der Oralität nahe stehen, fällt der häufige Gebrauch des Demonstrativums *əmə/əmti* und des anaphorischen *təti* in attributiver Stellung auf. Ihr Erscheinen selbst vor Eigennamen scheint durch die determinierende Funktion nicht begründet.

- (1) *Təti Dindəli, təti Arsia kūa 'h' ambūə ətumsjədəə.* (Wagner-Nagy 2003, 200)
'DEM (der) Dindəli, er kam auf die Welt als Arsia am Sterben lag.'

Eine derart markierte Fokuskontinuierung erscheint im Vergleich zu weiteren, früher aufgezeichneten und zu primär schriftlichen Texten redundant. Noch auffälliger ist die Verwendung von *əmə*, wenn man davon ausgeht, dass es zum Zweck der Neufokussierung eingesetzt wird. Eine mögliche Erklärung dieser Verwendungsweise, die jedoch am gesprochenen Sprachmaterial überprüft werden sollte, ist, dass die deiktische bzw. anaphorische (fokuskontinuierende) Funktion beider Pronomina abgeschwächt ist. Dies würde eine Übersetzung ins Deutsche mit dem bestimmten Artikel rechtfertigen. Es bleibt zu klären, ob es sich hier um den Ansatz eines Grammatikalisierungsprozesses handelt, der zur Her-

ausbildung eines Artikels führen könnte, oder ob diese Wörter weitere, diskursgliedernde Funktionen erfüllen. Der Frage wird in Punkt 2.5 nachgegangen.

2.1.5. Personalpronomen 3sg > Determinativsuffix > Prädestinativsuffix?

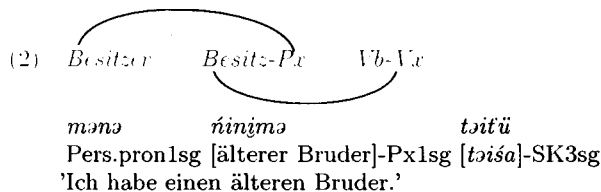
Der Prädestinativ ist eine den nordsamojedischen Sprachen gemeinsame nominale Kategorie, mit dativischer und essivischer Semantik, die bezeichnet, das ein Objekt für jemanden gedacht, geschaffen oder gehalten wird. Im Nganasanischen hat das Suffix die Form *-Tə*. Das Deklinationsparadigma beschränkt sich auf den Nominativ, Akkusativ und Genitiv. Morphosyntaktisch folgt das Prädestinativsuffix den Derivationssuffixen und geht den Kasussuffixen voran. Der deiktische Ursprung des Suffixes scheint aus semantischer Sicht wahrscheinlich.

Einige Forscher (z.B. Ago Künnap, Tibor Mikola) führen das Prädestinativsuffix, das für das Nordsamojedische in dieser Form rekonstruiert wird, auf das Personalsuffix der 3sg zurück. Diese Annahme ist jedoch, wie Janhunen (1998) gezeigt hat, aus phonologischen und morphosyntaktischen Gründen nicht haltbar.

2.2. Lexikalisierung von *tə*- in adverbialen Konstruktionen

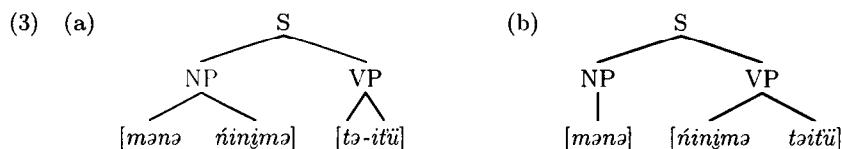
2.2.1. Lokalisierung → *habeo*-Konstruktion

Durch Kontraktion des anaphorischen Stammes und des Existenzverbs ist die Form *toiša* entstanden, die formell die gleiche Struktur aufweist wie deutsch *dasein*. Die Bedeutungen von *toiša* können auf einer Skala von konkreten (semantisch durchsichtigen) Verwendungen bis hin zum Abstrakten eingeordnet werden: 'vorhanden sein, zu finden sein, leben, haben, besitzen / иметься, быть (у кого-л.)'. Während der Demonstrativstamm *tə* ursprünglich eine Verbalergänzung mit der Funktion der Lokalisierung war, wurde in Kontexten, in denen Possessivrelationen im Verbargument auftauchten, die gesamte Struktur als *habeo*-Konstruktion reinterpretiert:



(Wagner-Nagy 2003)

Die syntaktische Tiefenstruktur (a) wurde reinterpretiert als syntaktische Tiefenstruktur (b):



Auch die lokativische Form des anaphorischen Pronomens geht eine solche Verbindung mit dem Existenzverb ein: *tənijsa* '(bei jdm.) vorhanden sein' < *təni*+ *isa* 'da' + 'sein' :

- (4) *bənsəgi nigi ɣojbu niŋi ərəkərə, kartako ɣamtə tənijsu*.
 alle-du Frau-du Kopf Postpos-Loc schön verzweigt Horn-pl [*tənijsa*]-SK3pl
 'Auf den Köpfen beider Frauen waren schöne, verzweigte Hörner.' (3577)

Beide Verben können lokativische Argumente aufnehmen, die sogar durch ein weiteres Demonstrativum besetzt sein können:

- (5) *əmni təiŋu lekjə?*
 hier [*təisa*]-SKInterr3pl Arzt-pl
 'Gibt es hier Ärzte (einen Arzt)?' (Wagner-Nagy 2003, 195)

tə- und *təni* füllen die vom Verb eröffnete Leerstelle für eine Lokaler-gänzung nicht aus. Dies ist ein eindeutiges Zeichen der semantischen Entleerung.

2.2.2. Idiomatisierung von *tərad'i*, *təni'ia* 'so' in adverbialer Konstruktion: ein erster Schritt zur Lexikalisierung?

Dem Lexem *təni'iaisa* liegt die Adverbialkonstruktion *təni'ia* + *isa* zugrunde: Die Adverbialbestimmung *təni'ia* ist die lativische Form des anaphorischen Pronomens, und *isa* ist der Infinitiv des Existenzverbs.

- (6) *tərad'i isa, təni'iaisa (təni'iaisa)* 'so seiend' > 'daher'

Das Nganasanische weist nur wenige Satzkonnektoren auf, konditionale und kausale Relationen zwischen koordinierten und subordinierten Gliedsätzen bleiben unmarkiert.

Die satzwertige Konstruktion mit der Bedeutung 'so seiend' kann in verschiedenen Kontexten erscheinen:

- (7) *daŋuru" ŋida kərsu hūo-gəʔə hūo-tə təŋi"ia ih"a-ndu.*
 Tundra-Genpl postpLat. Ding Jahr-Elat Jahr-Px3sg so sein-SK3sg
 'So ist die Lage auf der Tundra Jahr für Jahr.' (1680)
- (8) *təŋi"ia ihü"tə, sierle ŋintu aŋi"e".*
 so sein-Ger-Px2sg Sünde-Px2sg nicht groß
 'Wenn du dich so verhältst, begehst du keine großen Sünden.' (1700)
- (9) *təŋi"ia ihü", domtukumu"!*
 so sein-Ger kämpfen-ImpSKVx1pl
 'Wenn es so ist, sollen wir kämpfen!' (172)

In (7) wird *təŋi"ia* zwar textdeiktisch verwendet, es besteht jedoch keine logische Verbindung zwischen den Gliedsätzen, während in (8) eine konditionale Relation zwischen den beiden Gliedsätzen herrscht.

Die Konstruktion eignet sich, da sie die anaphorische Komponente *təŋi"ia* enthält, zur metonymischen Übertragung logischer Beziehungen, die zwischen den Gliedsätzen bestehen.

Die Zusammenschreibung spricht dafür, daß die Konstruktion von Sprechern des Nganasanischen als eine lexikalische Einheit empfunden wird.¹⁷ Die Konstruktion hat jedoch — obwohl sie in der Funktion eines Satzkonnektivs mit kausaler Bedeutung ('so seiend' > 'deshalb') idiomatisiert ist — ihre morphosyntaktische Durchsichtigkeit noch nicht verloren: Das Verb wird konjugiert (s. z.B. (7)), daher kann hier erst das Anfangsstadium der Lexikalisierung festgestellt werden.

2.3. Funktionswandel im Bereich der Ableitungen von *tə-*

Konjunktionen und *complementizer* weisen eine komplexe Semantik auf. Sie bezeichnen eine logische Relation zwischen zwei Gliedsätzen und beziehen diese Relation anaphorisch auf ein vorab oder kataphorisch auf ein nachfolgend definiertes sprachliches Bezugselement (eine Phrase oder eine Proposition). Die Referenzbestimmung wird in der Regel durch eine deiktische Komponente geleistet.

Es gibt nur eine geringe Zahl von syntaktisch wenig gebundenen nganasanischen Konjunktionen. Der Grund dafür liegt darin, dass diese Kategorie im Nganasanischen eine relativ späte Erscheinung ist.

¹⁷ Geläufig ist in gleicher Bedeutung auch die Konstruktion aus Aspektdeixis *təŋədi* 'so' und Existenzverb *isa*. Dass diese Konstruktion nicht kontaminiert wurde, hat möglicherweise prosodische Gründe.

2.3.1. Die Lexikalisierung von *təgətə(tə)* 'von dort, von da' > 'von da an, danach'

təgətə ist die elativische Form des anaphorischen Pronomens. Durch metonymische Erweiterung erlangte das Lexem die temporale Bedeutung der Nachzeitigkeit 'danach'. Als der Bedeutungswandel schon eingetreten war, wurde das Lexem durch das Possessivsuffix der dritten Person *tə* zu *təgətətj* erweitert.

- (10) *Tə doraka'a h^uaatə nənsu'ində*. *Təgətə mununtu tətj bəjkuədu*. . . *H^uaatə bɨnɨ h^uanu'a, təgətə mununtu*: „*mə bɨnɨmənɨ bakaðəərə h^uanə*!“ — *təndə nɨ da. Tətj nɨkū təgətətj mununtu*: „*Tə-tə*.“ (Wagner-Nagy 2003)

'Sie hielten bei einem gewundenen Baum an. Dann sagt ihr Mann. . . Er hat ein Seil am Baum befestigt, dann sagt er: „Stecke deinen Hals in dieses Seil“, — sagt er der Frau. Die Frau sagt danach: „Gut“.'

2.3.2. *təbtə* 'auch' — ein Fall der Lexikalisierung?

təbtə ist die soziative Partikel mit der Bedeutung 'auch'. Sie steht überwiegend¹⁸ vor dem Prädikat. In ihrem Skopus kann sowohl das Prädikat stehen (a) als auch eine topikalisierte Phrase (b), wobei zwischen diesen beiden Fällen strukturelle Homonymie herrscht. Möglicherweise wird der jeweilige Skopus durch suprasegmentale Mittel markiert.

- (11) (a) [topic *ŋadamə*] *təbtə* [präd *kundubta'ɨd*]
'Mein jüngerer Bruder schlief auch ein.' <22>
- (b) [topic *mənə*] *təbtə* [präd *babɨj horanantudum*]
'Ich wollte auch wilde Rentiere jagen.' <516>

Die Herkunft von *təbtə* gilt als unbekannt. Geht man von einer Ableitung aus, bietet sich die Segmentierung *tə* + *-btə* an, da die so ermittelten Segmente bekannte Morpheme des Nganasanischen sind. Im Vorderglied der Ableitung *tə* kann man das anaphorische Pronomen mit der Bedeutung 'dies, jenes (schon Erwähnte)' erkennen.

Es gibt eine Reihe von Wörtern im Nganasanischen, in denen ein denominales Suffix der Form *-btə(ə)*/*-bta* abgegrenzt werden kann: *bə-rəbtə* 'Äußeres'; *ŋadabta* ~ *ŋadabtə* 'jüngerer/jüngster [Bruder, Schwester]'; *nerəbtə* 'erster'. Möglicherweise gehört *mibtɨə* 'Sachen/Dinge' in

¹⁸ Vereinzelt kann *təbtə* auch dem Prädikat folgen. Eine detailliertere Beschreibung seiner Syntax steht noch aus.

diese Reihe (Katzschmann 2003, A.4.9). Auch das zweite Glied des heute nicht mehr produktiven Soziativsuffixes *-SəBTə*, geht auf dieses Suffix zurück.¹⁹ Vergleicht man die Bedeutung der Ableitungen mit der der Stämme:

(12) <i>ɲada</i> 'jüngerer'	:	<i>ɲadabta</i> ~ <i>ɲadabtə</i> 'jüngerer/ jüngerster [Bruder, Schwester]'
<i>nerə</i> 'vor (Postp.); früherer'	:	<i>nerəbtə</i> 'erster'
<i>bərə</i> 'Rand, Ufer'	:	<i>bərəbtə</i> 'äußerer'
<i>tagə</i> 'hinter (Postp.)'	:	<i>tagəbtə</i> 'hinterer Teil'

Es fällt auf, dass die letzteren Belege auf ein Adjektivbildungssuffix hindeuten; genauer handelt es sich, wie Katschmann vermutet, um ein Suffix mit limitativer Bedeutung (Katzschmann 2003, A.4.10, ung. *kijelőő jelzői szuffixum* — Wagner-Nagy 2003, 127): 'derjenige, der die Eigenschaft X hat, zu X gehörig (wobei X für die Bedeutung des Stammes steht)'. Folglich kann — wenn die vorgeschlagene Segmentierung richtig ist — als ursprüngliche Bedeutung von *təbtə* 'zu dem/dahin gehörig' postuliert werden, eine semantische Parallele zum deutschen Konnektoren *zudem*.

2.4. Modale Bedeutungen

2.4.1. *-tə*(") Modalpartikel des Evidentialis und des Mirativs

Die Partikel *-tə*(") gilt in der Fachliteratur als emphatische oder Verstärkungspartikel mit der Bedeutung 'ведь/hiszen/doch'.²⁰ In unterschiedlichen Kontexten variiert die Funktion der Partikel zwischen Mirativität (so in (a) und eventuell in (c)) und Evidentialität (b), (d):²¹

- (13) (a) *əɾəkəɾəmənə hoðətənduŋ-tə*. 'Du schreibst ja schön!'
 (b) *matə-tə tu'omu*. 'Wir sind doch/aber ins Zelt gegangen.'

¹⁹ Dieses Soziativsuffix ist zusammengesetzt. Das vordere Segment *-Sə* ist mit dem ersten Glied des Bildungs-suffixes der *nomina loci* *-SəMU* zu identifizieren. Das zweite Glied dieses Suffixes geht seinerseits auf *-MU* < PU **ma* zurück (Lehtisalo 1936, 109). Die Semantik des Segments *-Sə* ist unklar, es scheint jedoch wahrscheinlich, daß die Semantik des Suffixes *-BTə* ausschlaggebend für die Semantik des Soziativsuffixes 'samt dem Bezeichneten, zusammen mit dem Bezeichneten' ist.

²⁰ Nach Usenkova (2003, 104) „bejahende Partikel“ (*утвердительная частица*), Wagner-Nagy (2003, 173) „nyomósító partikula“ (*hiszen*), Katzschmann (2003, 160): „Verstärkungspartikel Exklamation“ — *na dann, los, in Ordnung*.

²¹ Die Beispiele (a) bis (d) stammen aus Usenkova (ebd.).

- (c) *soruli* "ə-tə". 'Es regnet ja!'
 (d) *nərənini* "bigaj-tə", *nintu bika* "kü.
 'Vor uns liegt doch/aber ein Fluß, kein Bächlein!'

Die Partikel wird an ihr Skopus klitisiert. Beispiel (13d) deutet darauf hin, dass die Partikel im fokussierten Satz dem Fokus angefügt wird. Im nicht-fokussierten Satz erscheint sie in Endstellung.

Die Zusammengehörigkeit der Partikel *-tə*(") und des anaphorischen Pronomens kann außer durch das ähnliche Lautbild auch durch funktionale Zusammenhänge gestützt werden.²² Das anaphorische *-tə* greift auf der propositionalen Ebene den aus dem Diskurs bekannten Aktanten auf, wobei die Evidentialitätspartikel hier die Proposition als vom (Sprecher und) Hörer bekannt markiert. Je nach pragmatischem Kontext kann die evidentielle Bedeutung ins Mirativische wechseln:

- (14) *ərakərəməmə hoðətənduŋ-tə*"
 [evid]: 'Du schreibst schön' → [mir]: 'Du schreibst schön'

2.4.2. *tə(ə)*, *təətə* — Pragma-Idiom

tə(ə) 'na dann, in Ordnung, einverstanden' ist laut Katzschmann ein Exklamativ, d. h. eine Verstärkungspartikel. Diese Partikel bedeutet Einwilligung bzw. Einverständnis, wie die folgenden Beispiele aus Katzschmann illustrieren (um den Kontext zu verdeutlichen, werden längere Passagen übersetzt):

- (15) Nach einiger Zeit sagte der jüngere zu seinem älteren Bruder: Ich will auf die Jagd gehen. Ich nehme einige Rentiere mit und unsere Schwester als Treiber unserer Rentiere. Der ältere Bruder sagte: (2785ff)
təə, mamsutə būdŋ.
 'In Ordnung, geh, wenn du willst.' (2789)
- (16) Nach einigen Monaten sagte ihr Ehemann: Hast du die Worte meiner Mutter (auch) nicht vergessen? Wir werden zu ihr zu Besuch gehen. Sprich zu deinem älteren Bruder. Der ältere Bruder sagte: (2960ff)
təə, maðajsa konibi "ti *ńaagəə.*
 'In Ordnung, (es wäre) gut wenn ihr zu Besuch geht.' (2967)

²² Die Erscheinung ist auch typologisch belegt. Vgl. Willett (1988).

- (17) Das ältere [Mädchen] sagte: Hier werde ich dich zurücklassen! Dann werde ich gehen (und) mein gutes Leben suchen. Die jüngere [Schwester] sagte: (3204)
təə, əmə kouki 'əm.
 'In Ordnung, ich werde hier bleiben.' (3208)

Die Form *təətə* scheint eine Formvariante zu sein. Entweder handelt es sich hier um eine reduplizierte oder um eine emphatische Form, erweitert durch den Px2sg.

In der überwiegenden Zahl der Belege erscheint die Partikel satzinitial, aus der syntaktischen Struktur ausgeklammert. Allein in der Konstruktion *ńaagəə təə* (*ńaagəə* 'gut') wird *təə* nachgestellt:

- (18) Die Alte hörte auf zu schweigen (und) rief: Schneidest du wieder die Worte deines Kindes ab? Wenn er gehen will, soll er gehen! Der Alte sagte: (2183)
ńaagəə təə, kərbubü'te, konɿ'!
 'Na gut, wenn du willst, gehe!' (2187)

Es ist leicht nachzuvollziehen, dass die Proposition *ńaagəə təə* 'das ist gut' (oder 'es ist gut') (*ńaagəə* 'gut') sich als Ausdruck des Einverständnisses eignet. Problematisch bei dieser Deutung ist jedoch die untypische Nachstellung des Topiks.

Wenn man *ńaagəə təə* als korrekten nganasanischen Satz mit propositionaler Bedeutung akzeptiert, dann dient dieser Satz möglicherweise als Schlüsselkontext, der idiomatisiert werden konnte. Die zugrunde liegende syntaktische Struktur wurde undurchsichtig, die pragmatische Funktion übernimmt nunmehr der Gesamtausdruck. So konnte auch ein Segment der ursprünglichen Struktur die pragmatische Funktion des Ganzen übernehmen.

Wie kann man dieses Entwicklungsszenario einordnen? Die ursprüngliche deiktische Funktion von *təə* wurde vollständig aufgehoben. Die neue, pragmatische Bedeutung, die nunmehr auch zur lexikalischen Bedeutung von *təə* gehört und im Lexikon repräsentiert werden sollte, wurde auf das Zeichen übertragen. Im Falle von *ńaagəə təə* erfolgte eine Idiomatisierung, also wurde das Lexikon durch ein Pragma-Idiom erweitert. Je nach (Enge der) Auslegung des Lexikalisierungsbegriffes kann man die Erscheinung als Lexikalisierung annehmen oder ausschließen. Die Beurteilung der Variante *təə* 'in Ordnung' ist schwieriger: Der Wandel hat hier

nicht zur Erweiterung des Lexikons beigetragen, sondern zur Erweiterung der lexikalischen (pragmatischen) Bedeutung eines Lexems.²³

Im folgenden Kontext signalisiert der Sprecher durch die Partikel *təə*, dass er eine Behauptung seines Gegenübers akzeptiert. Die darauf folgende Proposition schränkt jedoch diese Behauptung ein. So entsteht zwischen den beiden Propositionen eine konzessive Relation, die durch Reanalyse der Partikel zugeschrieben werden kann.²⁴

- (19) *təə, bəndej horə soteɲəj ɲəli'əŋ! ɲisɔ̌ɔite mərə nəli'.*
'Na gut, bislang hast du jeden Ewenken besiegt. (Doch) du willst sie nicht (alle) besiegen.'
(2523-4)

2.5. Sprachliches Zeigen > Determinieren > Text- bzw. Diskursgliederung

2.5.1. Die Rolle von *əmti(rə)*, *təti(rə)* in der Informationsgliederung des Satzes

Im Nganasanischen können Phrasen durch Ausklammerung aus dem Satz (Bewegung nach links) topikalisiert werden. Ein anaphorisches Pronomen ersetzt die topikalisierte Phrase im Satz:

- (20) (a) *Təti Diɲdili, təti Arsiə kūa'huambūa ɲətumsiədəə*
DEM Diɲdili DEM Arsiə im.Sterben.liegen geboren-werden-IndPerfVx3sg
'Der Diɲdili, der kam auf die Welt, als Arsiə im Sterben lag.'
(Wagner-Nagy 2003, 200)
- (b) *Banə turku təti əmə Koɔuta'agitə dɪrsitibi' kilometra.*
Hund See DEM DEM Dudinka-Elat 120 km
'Der Hund-See, der liegt 120 km entfernt von (diesem) Dudinka.'
(Wagner-Nagy 2003, 210)

²³ Für die Übertragung einer pragmatischen Bedeutung auf deiktische Morpheme soll hier ein weiteres Beispiel aus dem Ungarischen stehen. Das veraltete ungarische Wort *tat*, *tott*, das auf den durch ein Lokativsuffix erweiterten distalen pronominalen Stamm *ta-* zurückgeht, hat hier die Funktion der verstärkten Behauptung: *Monda Xanthus. Vezteg hijtwanfag, nem tudode hogij ezt een wgijan zeretem mijnt ennen magamat. Ees monda Esopus zeretede ez azzonkat? monda Xantus, zeretem tat.* 'Xantus sagte: Du [...], weißt du denn nicht, dass ich dies genau so liebe wie mich selbst? Und Esop fragte: Liebst du dieses Weibchen? Xantus sagte: Ich liebe sie wohl!'. (Pesti: Fab. 79a)

²⁴ Diese Entwicklung hat eine weitere Parallele in ungarisch *tat*: *Mykoron az roka giakorta wetne zemere az newften orozlannak hogy ew chak mijndenkoron egyet zywlne, mōda eczer nekij az orozlan Egyet zýlek tat de orozlant* 'Da der Fuchs der Löwin häufig vorwarf, dass sie immer nur ein Junges gebärt, sagte die Löwin einmal zu ihm: Ich gebäre eins, doch das ist ein Löwe.' (Pesti: Fab. 79a)

Die deiktische Funktion des Pronomens wird hier in eine syntaktische und informationsgliedernde umgewandelt.

In einem weiteren Schritt der Entleerung der deiktischen Funktion werden auch morphosyntaktische Merkmale der Koreferenz aufgehoben: In den weiteren Beispielen kongruiert *təti* nicht mehr mit seiner Bezugsgröße. Es besteht kein Rückverweis auf die *təti* vorangehende Phrase, vielmehr gilt *təti* als Grenze zwischen Topik und Prädikation.

Die topicmarkierende Funktion von *təti* ist nicht grammatikalisiert, und somit auf der pragmatischen Ebene anzusiedeln: Die lexikalische Markierung des Topiks ist optional und vorwiegend in der gesprochenen Sprache — dort jedoch in einer beachtenswerten Häufigkeit — anzutreffen.

2.5.2. Endophorische Deixis → Textdeixis →

Diskurspartikel: *təti*, *tətirə*

Betrachten wir die Verwendung von *tətirə* und *tətirə tahar¹a* im folgenden Textabschnitt:

- (21) 1. *Mənə nīmə náadətəmənū D'ini¹m'aku*. 2. *Maada mənə tərədi nīmə?* 3. *Tahar¹a mənə nīmə tən¹i¹ia isə D'ini¹miaku*. 4. *Suəbəsi mənə qətumtəbi¹əmə təisüə ə¹əmə*. 5. *Tətirə H¹arbə nīm¹ti*. 6. *Siti¹ bədürbūə nēmīnə sədəəmənū kontudüədəə*. 7. *Tən¹da¹a ičüə nī sədəə¹ bədürbūətənū nīnti¹ kauləru¹*. 8. *Tətirə nēqkəragi¹a četuamī*. 9. *Mənə desimə nūgo hontjə qə¹ isüə*. 10. *Tə čühənī sofsem dindiləqkə qə¹ isüə*. 11. *Tətirə tahar¹a siti¹ munudüə*: „*Tənə kiti¹təsudəj qanəj di¹ni¹nakənə tənə nīm¹lə i¹qəə D'ini¹miaku*.“ 12. *Mənə nibi¹ənə qətumkəličə¹ siti¹ qələi¹ munudüə*: „*Isüdə nī, nī nūədi isüdə*.“ 13. *Tən¹i¹ia isə, mənə qətumi¹əm*. 14. *Timinia H¹arba¹kumə təti ə¹əmə, Baarbə, lüə¹sa hədürmənū Baarbə nīm¹ti, náadətəmənū təbtə nīm¹ti Baarbə, tətirə tahar¹a bənsə sunsuəkalī küü¹üə*. 15. *Timin¹a, əmətəqə sam dəŋkumu¹o*. 16. *Nüəkütü, həədu¹tə nūəkütü nanu*. (Wagner-Nagy 2003, 198)

'1. Auf Nganasanisch heiße ich D'ini¹m'aku. 2. Wieso habe ich solch einen Namen? 3. [Tahar¹a] es kam so: 4. Denn als ich geboren wurde, lebte (noch) mein Onkel. 5. Dieser hieß H¹arbə. 6. Er kreuzte den Weg von meiner Mutter mit einem Toten. 7. Es ist verboten, vor Schwangeren mit einem Toten den Weg zu überqueren. 8. Dies ist ein sehr starkes Verbot. 9. Mein Vater war ein mächtiger Schamane. 10. Damals war er ein sehr berühmter Schamane. 11. Tətirə tahar¹a sagte er: „Um die bösen Geister zu binden, werde ich dich D'ini¹miaku ('kleiner Knoten') nennen.“ 12. Ich war noch nicht einmal geboren, da sagte er: „Es wird ein Mädchen, eine Tochter wird es.“ 13. So war es, (so seiend), ich kam zur Welt. 14. Nun unser H¹arbə, das ist mein Onkel, Baarbə, nach russischer Weise ist Baarbə sein Name, auf Nganasanisch heißt er ebenfalls Baarbə, Tətirə tahar¹a (er) verstarb ohne Nachwuchs. 15. Jetzt, diesen Sommer ist er verstorben. 16. Mit seinem Sohn, mit seinem letzten Sohn.'

Die Formen *tati*, *tatirə* sind mit dem anaphorischen Pronomen (erweitert durch den Px3sg und Px2sg in determinierender Funktion — s. 2.1.3) identisch. Die Partikel *taharia* ist eine Entlehnung aus dem Russischen und geht auf das Spenderlexem *manépb*, *manépя* 'jetzt, nun' (Dal' 1882), eine dialektale Variante von ru. *menepb* 'jetzt, nun' zurück.²⁵

Im Satz (21.5) wird *tatirə* anaphorisch verwendet: Ein vorher erwähntes Objekt (*əʔəmə* 'mein Onkel') wird als Thema weitergeführt. Im Satz (21.8) funktioniert *tatirə* textdeiktisch: Mit ihm wird auf die im vorigen Satz formulierte Proposition zurückverwiesen. Die übrigen Beispiele zeigen keine deiktische Funktion, hier wird die Bedeutung auch nicht auf der semantischen Ebene angesiedelt. Im Beispielsatz (21.14) könnte man noch einen anaphorischen Bezug vermuten, (21.11) schließt jedoch diese Deutung durch das Vorkommen des anaphorischen Personalpronomens *siti* eindeutig aus.

Die Partikeln sind im kognitiven Prozess der Sprachproduktion und des Sprachverstehens verankert. Sie erfüllen gleichzeitig mehrere kognitive Funktionen: Sprecherbezogen dienen sie der Gliederung des eigenen Gedankenganges, der Signalisierung des Anspruchs auf das Rederecht; Hörerbezogen leisten sie die Gliederung der Informationsstruktur.

Wie kann man den oben dargestellten Prozess funktionalen Wandels beschreiben? Fernandez-Vest (2000) bezeichnet den Vorgang, in dem primär der Lokalisierung dienende sprachliche Mittel zur Thematisierung verwendet werden, als Grammatikalisierung. Die von ihr untersuchten Partikeln fi. *tuota*, *totta*, *niin* und lp. *dat* sind funktionale Äquivalente des Nganasanischen *tati*, *tatirə*. Gemeinsam sind diesen Partikeln nicht nur die Distribution und Funktionen (Gliederung der Informationsstruktur) im Text, sondern auch die ursprünglich deiktische Funktion. Gehört die Thema-Rhema-Gliederung in den Bereich der Grammatik? Oder sollen pragmatische Funktionen im Lexikon wiedergegeben werden? Wie schon erwähnt, ist die Funktion von *tati* als Topikmarker nicht grammatikalisiert. Für eine konsequente Begriffsverwendung scheint es adäquater, die beschriebene funktionale Erweiterung als **Pragmatisierung** zu betrachten.

²⁵ Mündliche Mitteilung von E. Helimski, für die ich mich an dieser Stelle bedanke.

3. Zusammenfassung: funktionale Verschiebungen des deiktischen Stammes *tə-*

Bei der vorliegenden Untersuchung der verschiedenen Verwendungsweisen der deiktischen Stämme im Nganasanischen und deren Ableitungen wurde zwischen deiktischen Verwendungen und nicht-deiktischen Verwendungen unterschieden. Das nganasanische anaphorische Pronomen *tə* erscheint mit nicht-deiktischer Funktion in einer Vielzahl von Kontexten.

Dagegen finden sich kaum nicht-deiktische Verwendungen der proximalen und der distalen Demonstrativa (abgesehen von „Deixis ins Leere“). Dies hängt mit der unterschiedlichen Funktion der Demonstrativpronomina zusammen: Die anaphorische Bedeutung, der Rückbezug auf vorab Erwähntes, bleibt ein funktionaler Bestandteil der Komposita oder Ableitungen von *tə-* (z. B. in Konjunktionen, Modalpartikeln). Daher scheint unsere Annahme bestätigt, dass in der primären oder Kernfunktion des sprachlichen Zeichens das Spektrum seiner möglichen Entwicklungslinien vorkodiert ist.

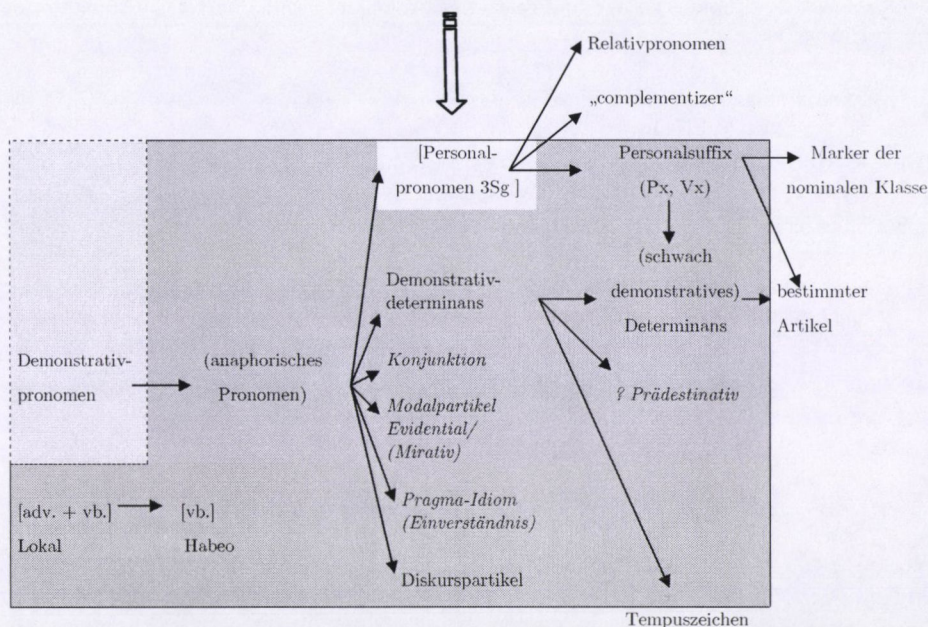
Die verschiedenen funktionalen Wandlungen von *tə-* sind in der folgenden Abbildung zusammengefasst. Hypothetische Entwicklungslinien werden durch Kursivschrift gekennzeichnet. Der dunkelgraue Hintergrund trennt diejenigen Entwicklungen, die im Nganasanischen eingetreten sind, von den in der allgemeinen Grammatikalisierungsforschung (so z. B. bei Lehmann 1995) beschriebenen „klassischen“ Grammatikalisierungsketten. Auf diese Weise werden Charakteristika der nganasanischen Entwicklung deutlich (Tabelle 7).

Es ist interessant zu beobachten, welche typischen Grammatikalisierungsphänomene im Nganasanischen **nicht** stattgefunden haben: Das Nganasanische hat kein Relativpronomen und keine kataphorischen *complementizer*. Zum Ausdruck komplexer Propositionen hat das Nganasanische dagegen einen großen Bestand an Partizipialformen (Wagner-Nagy 2003, 177–82).

Des weiteren kennt das Nganasanische keinen bestimmten Artikel, wobei einige Verwendungen des anaphorischen Pronomens sowie des proximalen attributiven Demonstrativs auf eine Tendenz zur zunehmenden Markierung der Determination hindeuten.

Tabelle 7

[siti]



Abkürzungen

A = Akkusativ
 abs = absoluter Gebrauch
 attr = attributiver Gebrauch
 du = Dual
 El = Elativ
 evid = Evidential

G = Genitiv
 Ind = Indikativ
 Interr = Interrogativ
 Lat = Lativ
 mir = Mirativ
 N = Nominativ

Nsam. = Nordsamojedisch
 präd = Prädikat
 Prol = Prolativ
 PS = Protosamojedisch
 SK = subjektive Konjugation
 U = Uralisch

Literatur

- Abondolo, Daniel (ed.) 1998. *The Uralic languages*. Routledge, London & New York.
- Abraham, Werner 1991. The grammaticalization of German modal particles. In: Elizabeth C. Traugott – Bernd Heine (eds): *Approaches to grammaticalization. Vol II: Focus on types of grammatical markers*. (Typological Studies in Language 19/1, 2), 331–80. John Benjamins, Amsterdam & Philadelphia.
- Castrén, Matthias Alexander 1854/1969. *Grammatik der samojedischen Sprachen*. Hrsg. von Anton Schiefner = *Nordische Reisen und Forschungen* 7. St. Petersburg & Leipzig.

- Closs Traugott, Elizabeth 2002. Regularity in semantic change. Cambridge University Press, Cambridge.
- Collinder, Björn 1965. An introduction to the Uralic languages. University of California Press, Berkeley.
- Dal', Vladimir I. 1882. Толковый словарь живого великорусского языка. Государственное издательство иностранных и национальных словарей, С.-Петербург & Москва.
- Diessel, Holger 1999a. Demonstratives. Form, function, and grammaticalization. John Benjamins, Amsterdam & Philadelphia.
- Diessel, Holger 1999b. The morphosyntax of demonstratives in synchrony and diachrony. In: *Linguistic Typology* 3: 1–49.
- Ehlich, Konrad 1982. Deiktische und phorische Prozeduren beim literarischen Erzählen. In: Eberhard Lämmert (ed.): *Erzählforschung. Ein Symposium*, 112–29. Metzler, Stuttgart.
- Fernandez-Vest, Jocelyne M. M. 2000. Déixis, interaction, grammaticalisation: le cas des particules énonciatives en same du Nord et en finnois. In: *Grammaticalisation aréale et sémantique cognitive: les langues fenniques et sames, OURAL – URAL* nr 1. Paris.
- Frajzyngier, Zygmunt 1996. On sources of demonstratives and anaphors. In: Barbara Fox (ed.): *Studies in Anaphor*. John Benjamins, Amsterdam & Philadelphia.
- Hajdú, Péter 1990. Einiges über Fürwörter. In: *Linguistica Uralica* 26: 1–12.
- Hajdú, Péter – Péter Domokos 1987. Die uralischen Sprachen und Literaturen. Buske, Hamburg.
- Heine, Bernd 1992. Grammaticalization chains. In: *Studies in Language* 16: 335–68.
- Heine, Bernd – Tania Kuteva (eds) 2002. World lexicon of grammaticalization. Cambridge University Press, Cambridge.
- Helimski, Eugene 1982. Древнейшие венгерско-самодийские языковые параллели. Наука, Москва.
- Helimski, Eugene 1997. Die matorische Sprache. Wörterverzeichnis – Grundzüge der Grammatik – Sprachgeschichte (*Studia Uralo-Altaica* 41). SZTE Finnugor Tan-szék & MTA Nyelvtudományi Intézet, Szeged & Budapest.
- Helimski, Eugene 1998. Nganasan. In: *Abondolo* (1998, 480–515).
- Helimski, Eugene 2003. Grammaticalization of abstracta in Samoyedic and Ugric languages: A collection of sample cases. Vortrag gehalten im Rahmen des Budapesti Uráli Műhely 4, Tischvorlage.
- Himmelmann, Nikolaus 1997. Deiktikon, Artikel, Nominalphrase: Zur Emergenz syntaktischer Struktur. Niemeyer, Tübingen.
- Itkonen, Erkki – Ulla-Maija Kulonen (eds) 1992–2000. Suomen sanojen alkuperä I–III. Suomalaisen Kirjallisuuden Seura, Helsinki.
- Janhunen, Juha 1977. Samojedischer Wortschatz (*Castrenianumin Toimitteita* 17). Suomalais-ugrilainen Seura, Helsinki.
- Janhunen, Juha 1981. Uralilaisen kantakielen sanastosta. In: *Journal de la Société Finno-ougrienne* 77: 219–69.

- Janhunen, Juha 1989. Samojedin predestinatiivisen deklinaation alkuperästä. In: *Journal de la Société Finno-ougrienne* 82: 298–301.
- Janhunen, Juha 1998. Samoyedic. In: Abondolo (1998, 457–79).
- Katzschmann, Michael 2003. *Chrestomathia Nganasanica*. Ms.
- Kosterkina, Nadežda T. – Alexander Č. Momde – Tat'jana Ju. Ždanova 2001. Словарь нганасанско-русский и русско-нганасанский. Просвещение, Санкт-Петербург.
- Künnap, Ago 1987. Põhjasamojeedi predestinatiivsest deklinatsioonist. In: *Journal de la Société Finno-ougrienne* 81: 209–220.
- Labanauskas, K. I. 2001. Ня "дурьмы" тубутугйя. Нганасанская фольклорная хрестоматия. The Nganasan Folklore Reader. Таймырский окружной центр народново творчества, Дудинка.
- Lehmann, Christian 1995. Thoughts on grammaticalization (LINCOM Studies in Theoretical Linguistics 1). Lincom Europa, München & Newcastle.
- Lehtisalo, Toivo 1936. Über die primären uralischen Ableitungssuffixe (*Mémoires de la Société Finno-ougrienne* 72). Suomalais-ugrilainen Seura, Helsinki.
- Majtinskaja, Klara E. 1974. Основы финно-угорского языкознания. Вопросы происхождения и развития финно-угорских языков. Наука, Москва.
- Mikola, Tibor 1965. A magyar tárgyrag eredetéhez. In: *Nyelvtudományi Értekezések* 46: 57–62.
- Mikola, Tibor 1988. Geschichte der samojedischen Sprachen. In: Sinor (1988, 219–63).
- Paasonen, Heikki 1906. Über den ursprünglichen anlaut des finnischen demonstrativpronomens *se*. In: *Finnisch-Ugrische Forschungen* 6: 211–2.
- Ramat, Giacalone A. – Paul J. Hopper (eds) 1998. The limits of grammaticalization. John Benjamins, Amsterdam & Philadelphia.
- Redder, Angelika 1990. Sprachlicher Handel und Kommunikativer Absicht. „denn“ und „da“. Niemeyer, Tübingen.
- Rédei, Károly (ed.) 1988–1991. Uralisches Etymologisches Wörterbuch I–III. Akadémiai Kiadó & Harrasowitz, Budapest & Wiesbaden.
- Róna-Tas, András 1976. Az etimológia elméleti és módszertani kérdései a turkológiában. In: *Nyelvtudományi Értekezések* 89: 262–7.
- Sammallahti, Pekka 1988. Historical phonology of the Uralic languages. In: Sinor (1988, 478–554).
- Sebestyén, Irén N. 1964. Két szamojéd visszaható névmás. In: *Nyelvtudományi Közlemények* 64: 431–6.
- Setälä, Emil Nestor 1902. Zur finnisch-ugrischen Lautlehre. In: *Finnisch-Ugrische Forschungen* 2: 268–9.
- Sinor, Denis (ed.) 1988. The Uralic languages. E. J. Brill, Leiden.
- Tereščenko, Natal'ja Mitrofanovna 1979. Нганасанский язык. Наука, Ленинград.
- Usenkova, E.V. 2003. Лексические и синтаксические средства выражения модальности в нганасанском языке. In: *Linguistica Uralica* 39: 100–11.
- Vértes, Edit 1967. Die ostjakischen Pronomina. Mouton, Bloomington & The Hague.

- Wagner-Nagy, Beáta 2003. Chrestomathia Nganasanica (Studia-Uralo-Altaica Supplementum 10). SZTE Finnugor Tanszék & MTA Nyelvtudományi Intézet, Szeged.
- Willett, Thomas 1988. A cross-linguistic survey of the grammaticalization of evidentiality. In: *Studies in Language* 12: 51–97.

Adresse der Verfasserin: Réka Zayzon
Finnisch-Ugrisches Seminar
Bogenallee 11
Hamburg
D-20144
Deutschland
Reka_Zayzon@public.uni-hamburg.de

BOOK REVIEWS

László Varga: Intonation and stress: Evidence from Hungarian. Palgrave Macmillan, Basingstoke, 2002, xvii + 229 pp.

László Varga has been playing a significant role in the development of Hungarian theoretical linguistics in the past two decades. The beginnings of his career coincided with the beginnings of Hungarian generative grammar in which he made an essential contribution to one of its segments. Whereas research in generative grammar basically centred around syntax, important studies were published on the intersection of syntax and semantics, too, and it also became clear that this syntax is also related to the phonetic realisation of an utterance. It was László Varga who from the very beginnings offered a systematic analysis of the phonetic/phonological aspects of the sentence relating them to syntactic structure within the syntax-phonology interface.

It was also very early on that he started to study the functional features of the utterance: he wished to determine those aspects of meaning which are conveyed by sentence prosody, especially intonation and stress. Accordingly, his research showed two parallel directions: on the one hand, he wished to derive the formal properties of sentence prosody from the description of the syntax-phonology interface, on the other, he wished to offer a semantic-functional interpretation of sentence prosody, those aspects of interpretation which cannot be directly derived from syntactic structure. His studies described the phonological and semantic aspects of Hungarian intonation contours (especially their taxonomy) and the ways they are determined by syntax. In addition to his numerous articles, he was the author of a much cited chapter on intonation in the *Phonology* volume of *A Structural Grammar of Hungarian* (Kiefer 1994), and his international publications contributed to the publicity of modern Hungarian theoretical thinking on intonation abroad.

The fact that the present comprehensive summary of his work appeared with an acclaimed international publisher shows a serious interest in the topic as well as the qualities of this work. The main merits of this book include the following:

- It describes the phonological rules of the production of Hungarian simple, derived and compound words.
- It describes the stress rules of Hungarian syntactic constructions and the processes of deaccentuation.
- It studies the rhythmical variation of Hungarian compound words with two primary stresses and offers a theoretical account of them.
- It studies the phonological status of Hungarian primary stress and rhythmical secondary stress.
- It studies the phenomenon of contour insertion and offers a theoretical account of it.
- It adds new aspects and results to several issues already discussed in his earlier work, including the taxonomic analysis of Hungarian intonation, its autosegmental analysis and the intonational segmentation of Hungarian utterances.

Each chapter is followed by a summary which can serve as a useful guide to the particular issues discussed. Below, I will only mention those details which either have an importance beyond the particular issue discussed or the treatment of which may give rise to considerations different from those of the author.

1. The set of prosodemes

In Chapter 2, the author specifies the following prosodemes within intonation: the melodic prosodemes (recurring pitch patterns in paradigmatic contrasts with one another as wholes), the upstep prosodemes (variations in the height of the peak of an intonation contour in relation to the height of the peak of the preceding intonation contour), the stress prosodemes (significant degrees of syllabic prominence) and the pause prosodemes (the complete lack of intensity). The melodic and upstep prosodemes constitute intonation proper and the stress and pause prosodemes are closely tied to them.

As it will also be pointed out in the following section, the book offers a highly detailed and elaborate description of these building blocks of intonation and their relations.

As for pause, although it is often referred to by the author in the generation of an intonation contour, it is clear that it is related to duration (i.e., 'the complete lack of intensity', as pause is defined, must have a significant duration). We can observe, however, yet another instance of duration playing a role in the shaping of intonation. As an example, a falling contour can have three variants, depending on its temporal realisation: without prolongation, prolonged on the initial part, and prolonged on the final part. These variants can be shown in the following example (double letters indicate prolongation): *Pállal, Páállal, Pállaal* 'with Pál'. Since these variants differ to some extent according to the positions they occur in, it remains a question if it is reasonable to include relative time (duration) in the set of prosodemes (differentiating long and short durations as discrete elements), or such differences can only be treated as paralinguistic phenomena.

Whereas the author considers pause an independent prosodeme, in the study of appended contours on p. 49 one can see that the appended contour in the examples of (26) can be considered a separate intonational phrase (IP) whether or not there is a pause before it because it is melodically separated from the preceding rising-falling contour.

At the same time, as it is shown in several places of the book, the half falling contour can only be considered an independent IP if it is followed by a pause. One may ask, to what extent can pause be considered an independent prosodeme, or, alternately, to what extent is it the structural consequence of a melodic prosodeme (even if this pause can occasionally be optional). It appears to me that a more formal definition of pause could be helpful in differentiating two variants of the same sentence: (27a) (*A* 'nagymama, □ \neg mondta) 'It was Grandma, he said' and (27b) (*A* 'nagymama mondta) 'It was grandma who said it'. Namely, when pronouncing a sentence with "didactic" purpose, it appears that in a third variant, (27c) *A* 'nagymama □ mondta, the word *mondta* belongs to the first intonation contour similarly to (27b) without a pause.

2. The taxonomy of Hungarian intonation. The intonational lexicon

In Chapter 3 the author offers a detailed system of the melodic prosodemes of standard Hungarian, describing twelve character contours and an appended contour. By associating each of the characteristic forms with their appropriate abstract meaning, he defines a lexicon of intonation from which each of the melodic prosodemes is constructed. This is the first important logical step towards the generation of the intonation of an utterance. This lexicon shown in figure 3.2 (p. 51) allows us notice the following: within the groups of each of the first three sets of tonal types it is always the second subtype (half-fall, high monotone, monotone-fall, respectively) whose characteristic semantic content includes the characteristic semantic content of the two other subtypes of the given set.

The description of the semantic meaning of intonation is far from being an easy task but, based on his subtle observations, the author succeeds in making the finest distinctions as well. The difficulty of such distinctions is, however, shown by the fact that the intended distinction does not seem to always follow from the descriptions. Accordingly, on page 36 the distinction between (4b) |' *Angéla néni*. | and (4c) |[∨] *Angéla néni*. | 'Aunt Angela' is described as follows: whereas the meaning of the half-falling (4b) is 'a remark or explanation can be added', that of the fall-rise of (4c) is 'there is some kind of conflict here'. Clearly, such a (broad) interpretation of the sense of (4b) cannot exclude that of (4c) suggesting that, in general, the half-falling contour can be used in situations including but not restricted to what the fall-rise of (4c) suggests. Such examples indicate the difficulties of the semantic definition of meaning associated with the various intonation contours. Whereas the dissertation successfully shows that the various contour types are related in such a way that, applying a decline or rise to an underlying "horizontal" contour, both the falling and rising contours can be generated, the question remains if one can assume a derivational relation between the semantic interpretations of such contours as well.

The issue of the relation between the contours and their semantic interpretation emerges again in the case of the identification of the second-type descent. According to the book this contour is phonetically identical with the descent, but their meanings differ so radically that the two should be considered as two separate homophonous tones. This solution has the consequence that for the definition of character contours László Varga does not consider sufficient the differentiation on the basis of contours.

As an interesting counterexample, the sustained contours include three phonetically clearly distinct contours (rising, high monotone and descent) each of which receives the same primary semantic interpretation ("forward pointing"). Can we say then that these latter contours are synonyms with minor additional senses?

Varga's assumption that the intonational lexicon consists of contours with separate meanings is shown by the interpretation of the preparatory contour. Accordingly, since this contour does not have a meaning of its own, it is not included in the intonational lexicon but it has the function to initiate a new IP. Always immediately following an IP-boundary, this preparatory contour can easily be identified even if it does not indicate such a boundary (cf. (30a–b) on p. 53): (30a) |[∨] *Gyere!* | □ *Ide 'ne firkálj!* | 'Come. Don't scribble here.' and (30b) |[∨] *Gyere ide!* | □ *'Ne firkálj!* | 'Come here. Don't scribble.'

This assumption only becomes problematic when the preparatory contour continues the melody of the preceding contour; i.e., when the contours are not melodically separate. According to Varga, due to the lack of a pause "such a preparatory contour

stops being a preparatory contour and is analysed as part of the contour that precedes it" (pp. 53–4). In addition to the fact that such a wording reflects something like a sentence with no pause is the result of some generation (which and the rules of which remain unspecified), in my reading such sentences will be ambiguous, i.e., the preparatory contour will not have the exclusive interpretation of belonging to the preceding contour: in the sentence *Gyere ide ne firkálj*, if it does not contain a pause, the word *ide* 'here' can both be interpreted as the preparation of the contour of *ne firkálj* 'don't scribble' and part of the contour of *gyere* 'come'.

3. The intonational phrase

The structural definition of intonation is central to the topic of the book. László Varga considers the Intonational Phrase as the fundamental unit of intonation. It is defined as delimited by the symbol [||] and consists of an obligatory terminal part specified by any of the meaningful intonation contours, an optional scale and an optional preparatory part. The IP is defined on the basis of this internal structure starting from the utterance (i.e., top down) rather than bottom up. He supports this choice by the fact that lower level units (such as the phonological phrase) are interpreted in different ways in the literature and that they are hard to identify; furthermore, Vogel's intonation phrase is not characterised by boundaries relevant for perception which would be needed for an unambiguous description.

Varga does not exclude the relation of intonation to syntactic structure, though. This becomes clear when he justifies why it is the IP rather than the contour that is the basic unit of intonation. By doing so one can establish a relation between character tones and syntactic structure in the form of sense units (e.g. topic and comment). He also mentions cases when an IP does not correspond to such a sense unit, such as in (37a) | 'Megvették a szomszéd házát' 'They bought their neighbour's house' (p. 58). His solution for such cases is the so-called attitudinal contour replacement, but this rule can only apply to the determination of the intonation of linear sequences. As a consequence, the sentence (40) *Találkoztam — jól ülsz? — az Angélával* 'I've met — are you sitting comfortably? — Angela' (p. 59) which consists of syntactically discontinuous constituents is not considered to have a discontinuous intonation, instead, it is assigned three independent IPs. Whereas, understandably, this solution is in accordance with Selkirk's Strict Layer Hypothesis (Selkirk 1984), it is difficult for our native intuition, not to mention our linguistic expectation according to which if a character contour corresponds to a single sense unit, then we would expect a sense unit represented by a discontinuous syntactic unit to correspond to a discontinuous character contour, too. The argumentation according to which the relatively lower peak of the IP *az Angélával* is the result of an utterance-level (inter-IP) downdrift is not persuasive. The author offered me the chance to make an experiment with his sample recording of the above sentence. When the embedded phrase *jól ülsz* was removed from the recorded utterance, the remaining two segments formed a perfectly continuous intonation contour without the slightest downdrift between the adjacent melody segments of *találkoztam* and *az Angélával*. According to this one could find no phonetic/perceptual reason to assume three IPs in (40). Naturally, assuming just two IPs (as suggested by the experiment) would result in an IP containing another IP which would contradict Selkirk's hypothesis. However, this interpretation of the structure of (40) would be supported by Ladd's view, an approach also considered by Varga. Experiments do not fully support Varga's phonetic description of downdrift across IPs either. Considering the utterance

(38) | 'Megkérdeztem, hogy 'mennyit fizessek. | □ és 'azt mondta, hogy 'semmit. | 'I asked him how much to pay, and he told me to pay nothing' (p. 58), Varga points out that downdrift starts with the syllable *azt* in the second IP so that its pitch does not decrease but roughly coincides with the pitch of the syllable *fi-* of the word *fizessek*. Our test measurements based on Varga's own data indicate that the syllable *azt* starts at a significantly higher pitch than the syllable *fi-*, accordingly, the resetting of downdrift can be expressed in absolute, rather than just relative terms: resetting involves upstep. Returning then to the analysis of (40) above we should say that in order to find any phonetic clue of the start of a new IP for the phrase *az Angélával*, we should have expected to identify a new starting pitch (an upstep) as well.

4. The melody formation of Hungarian utterances

Chapter 5 is about the relation between intonation and syntax. As for melody formation, Varga's approach proves straightforward: start by fixing stresses and continue by assigning contours to stressed positions. It is a further important observation that there are right-to-left dependencies between the contour of the last sister MB and all the preceding sister MBs. (MBs, i.e., minor tonosyntactic blocks are those major-stressed syntactic constituents that are the immediate or non-immediate constituents of highest-ranking sentences, HRSs; p. 97.)

The chapter describes the rules by the help of which a complex melody can be generated. We can agree with the author that an intonation thus generated may be characteristic of pre-planned speech or careful reading and in faster speech such finer details can disappear. Without going into further detail I would like to suggest that Varga's rules of melody formation are based on such simple and plausible principles which can be suitable for the successful description of the intonation of other languages as well. There remains just one remark of some uncertainty regarding pause. According to Varga all character contours end in an IP boundary, no matter whether or not they end in a pause, with one exception: the half fall character contour if ending in a pause turns the scalar half fall into a terminal one and creates a new IP-boundary at the end of the half fall. If we have to interpret a new IP-boundary here without a change of the contour, this reintroduces the issue of the relation between syntactic and phonological phrasing: What is the distinctive sense unit according to which one can differentiate the following two phrases: (63a) | 'Pétert küldik, aki 'diák. | □ and (63b) | 'Pétert küldik, □ aki 'diák. | □ 'They are sending Peter, who is a student' (p. 121)?

5. On stress and rhythm

Varga makes important observations and generalisations on Hungarian stress. As he points out, he does not further differentiate phonological main stresses according to their intensity, since what is relevant for intonation is that they initiate character tones and represent pitch accent. Consequently, there is no need for the metrical grid in Hungarian. The book arrives at this conclusion after offering a profound and excellent review of the three main current phonological models. I carried out an instrumental analysis of the examples (1a)–(1c) found on p. 150 which gave full support to Varga's phonological analysis: (1a) *tizenegy* ['tizen'egy] 'eleven', (1b) *pont tizenegy* ['pont [tizen'egy]] 'exactly eleven' and (1c) *tizenegy pont* [['tizen,egy] 'pont] 'eleven points'.

Since the segment *tizenegy* found in all three utterances has basically the same rhythmical pattern, the fact that the interpretation of the primary and secondary

stresses in perception was different in the three utterances can indeed be accounted for by the influence of the phonological environment, i.e., by phonological rules.

In the last chapter Varga presents an interesting study of rhythmical secondary stress. By pointing out that such a stress can be the starting point of a melody insertion he also gives support for the phonological status of rhythmical secondary stress. He sees the difference between secondary stress and rhythmical secondary stress primarily in that whereas the former can appear on the first syllable of a single phonological word (such as on the first syllable of the pronoun *nektek* in (4) *Elmondok nektek egy történetet* 'I'll tell you a story' (p. 181), the secondary stress on odd-numbered syllables can also be conditioned by the rhythm (such as on the third syllable of the word *elmegyek* in (7) *Elmegyek a könyvtárba* 'I am going to the library' (p. 182). One may wonder whether the kind of secondary stress (rhythmical or not) can be decided in a case when the third syllable of an utterance has secondary stress and that syllable is at the same time word initial. Varga also presents the results of an experiment to decide which are the preferred syllables for rhythmical secondary stress. The evaluation of the perception of (10) *Ez egy kiapadhatatlan erőforrás* 'This is an inexhaustible source' (p. 185) indicated that the most preferred syllable was the third one, followed by further odd-numbered syllables, and the even-numbered syllables received an ever smaller preference towards the end of the utterance. I would like to add the following here: since secondary stress could also be placed on non-rhythmical even-numbered syllables, the above example allows us to assume a possible explanation. These even-numbered syllables contain grammatical morphemes (*-hat-*, *-atlan-*) which can condition secondary stress in the same way as the word *nektek* can in the even-numbered syllable of the above (4). As a result, rhythmical secondary stress may not be conditioned by rhythm alone; more general conditions on secondary stress may also apply.

Varga also examines the issue where Hungarian can be placed in the syllable timing vs. stress timing dichotomy and concludes that, although it is not a clear type, Hungarian is towards the syllable timing end of this continuum, especially due to the fact that it lacks systematic vowel reduction in unstressed syllables. Although further studies are certainly required we may note that, according to Olszky's recent dissertation, the vowels of certain syllables can also be longer or shorter depending on the position of the syllable. Furthermore, a syllable with a long vowel can be perceived to have secondary stress — independently of its position in the rhythmic structure — because a long vowel has a longer intensity, too. These new data can supplement Varga's first observations and the typological classification of Hungarian.

6. Summary

With his recent book László Varga offers the most comprehensive to date description of Hungarian prosody, especially intonation. His results are well accommodated in the main trends of the linguistics literature and offer a valuable contribution to the development of both generative grammar and functional grammar. His results are new not only in the Hungarian linguistics literature, but by its understanding and critical treatment of important issues in the relevant literature in general they also contribute to the development of a general theory of intonation. László Varga's book *Intonation and stress: Evidence from Hungarian* is most welcome in the world of studies on syntax and intonation.

László Hunyadi

References

- Kiefer, Ferenc (ed.) 1994. *Strukturális magyar nyelvtan 2. Fonológia* [A structural grammar of Hungarian 2. Phonology]. Akadémiai Kiadó, Budapest.
- Ladd, D. Robert 1996. *Intonational phonology*. Cambridge University Press, Cambridge.
- Selkirk, Elizabeth O. 1984. *Phonology and syntax: The relation between sound and structure*. MIT Press, Cambridge MA.

Jukka Mäkisalo: Grammar and experimental evidence in Finnish compounds. University of Joensuu, Joensuu, 2000, x + 179 pp.

Jukka Mäkisalo's book consists of an introductory chapter and five articles: the first two of these have a purely linguistic (grammatical, descriptive) topic, whereas the remaining three are of a psycholinguistic character. In the introduction, the author looks at the relationship between autonomous linguistics and psycholinguistics and claims that the latter cannot do without the former, while the converse is not true: the descriptive potential of a grammar (in the case at hand, a generative grammar) stands or falls on itself, it is not necessary to support its validity from the outside (e.g., in terms of mental processes). In that sense, Mäkisalo's work is rather psycholinguistic in nature, given that in a book on descriptive grammar there would be no place for psycholinguistic investigations; also, the structure of the book suggests that the parts about descriptive and theoretical linguistics are there to provide a theoretical background to the psycholinguistic investigations presented. The reviewer, nevertheless, has the impression that the descriptive-theoretical claims surpass the psycholinguistic studies not only in length but also in significance.

Following the reflections on the relationship between autonomous linguistics and psycholinguistics, in the rest of the introduction Mäkisalo touches upon issues that are to be explored in the papers to follow. The first such issue is the place of compounding in grammar: whether it belongs in the lexicon or in the syntax. The main problem hinges upon the fact that the notion of 'word' is unclear. It is generally agreed that compounding by no means forms part of the core of morphology. It is also a widespread view that morphology is split between lexicon and grammar, but there is a noteworthy question that pries into the very basics of generative grammar: What keeps syntax from entering the lexicon if it is not the concept of morphology itself?

Two arguments can be adduced for the inclusion of compounding in the lexicon. One is based on the specific meaning that compounds may have; but then, there are idioms having some specific meaning, too, hence this argument has to be discarded. The other one is based on stress. Inclusion in the syntax, on the other hand, is supported by the facts that compounds consist of several words just like syntactic structures do; that productive and regular types of compounding force us to analyse the constituents of the compound; that some compounds are very close indeed to corresponding syntactic structures (*atom bomb* vs. *atomic bomb*); that in deverbal compounds there is a clear connection between the semantic relationship of the constituents and the argument structure of the verb stem in the posterior constituent; that in endocentric compounds the order of constituents is identical with that observable in syntactic structures (e.g., in French, as opposed to English or Finnish, the head comes first in both cases).

Next, the author briefly comments on the issue of productivity and claims that it is the most expedient to investigate the productivity of types of compounds in terms of their morphological makeup. In Finnish, the productivity of compounding is very high; this is demonstrated by the fact that in the large corpus studied, 58% of all compounds occur just once. (For the reviewer, this argument is not at all convincing since it is not only occasional neologisms that may constitute *hapax legomena* but also rarely used ancient forms—and on the other hand, neologisms often catch on and are used a lot, and even an occasional formation may occur more than once in a given text.)

The first article ('To what extent are compounds morphological? A review of problems in linguistic theories', 29–60) is a historiographic survey of (American) structuralist and generative linguistics in terms of when and how compounding was claimed to belong to the lexicon, to morphology, or to syntax.

Mäkisalo points out that the placement of compounding among linguistic levels changed continuously. Bloomfield took it to be a borderline case, within grammar, between morphology and syntax—but he located quite a number of compounds within the lexicon. In early generative grammar, there was practically no morphology; compounds were formed from sentences by way of syntactic transformations. Later on, compounding was transferred into the lexicon; compounds were created by combinations of syntactic categories. It was then that the distinction between root and deverbal compounds became customary and that in the latter the possible effect of the verb started to be attributed some significance.

Issues more closely related to Finnish are raised by Allen's (1979) Extended Ordering Hypothesis (EOH). In Finnish, anterior constituents of root compounds are often in the genitive: *aallon+harja* 'wave-gen+surf: surf of a wave', *koiran+koppi* 'dog-gen+hut: doghouse', *rotan+myrkky* 'rat-gen+poison: rat poison'; *kissan+kello* 'cat-gen+bell: (a flower of) cat's bell'. As the examples show, the semantic relation between the constituents may be diverse. The use of the genitive is productive,¹ stress unambiguously shows these items to be compounds, and the anterior constituent has a general reading, as opposed to possessive constructions. This seems to suggest that, in Finnish, regular inflection may precede compounding, in contradiction to the principles of EOH.

Generative grammar in recent times has primarily been interested in synthetic compounds. In Finnish, argument structure may be satisfied by an agent appearing as an anterior constituent, e.g. *linnun+laulu* 'bird-gen+sing-dn: bird's singing' (where dn = deverbal noun-forming suffix), even with an eventive reading.² The genitive suffix appears on object anterior constituents, too: *palkan+maksu* 'salary-gen+pay-dn: paying of salary'. It also occurs on phrase-internal arguments: *Jaanan hiihtäminen* 'Jaana-gen ski-inf3-dn: Jaana's skiing', *auton ostaminen* 'car-gen buy-inf3-dn: buying

¹ Anterior constituents in the genitive plural appear in some cases in a form that does not occur on its own: e.g., *opettajain+huone* 'teacher-pl.gen+room: staff room' (independent form: *opettajien*), *nuoriso+asiain+keskus* 'youth+matter-pl.gen+centre: youth centre, office where problems of the young are dealt with' (independent form: *asioiden* ~ *asioitten*). Such cases are rare, and usually lexicalised. It appears, however, that Mäkisalo ignores anterior constituents in the genitive plural not only in this respect, but in general, too.

² Mäkisalo could have discussed complex events, following Grimshaw (1990), but he did not.

a car'. The question is whether syntactic case marking may influence compound-internal case marking without the latter also being situated within syntax...

If, in Finnish, a synthetic compound becomes the head of another compound, it is only a root compound that can be produced in that way: *työn+tekijä* 'work-gen+do-dn: worker, employee', *avain+työntekijä* 'key+work-gen+do-dn: key employee', *apteeki+työntekijä* 'pharmacy+work-gen+do-dn: drugstore employee; pharmacy clerk'. What Mäkisalo concludes from all that is that 'left-branched' compounds of three or more constituents can only be root compounds—this must be an oversight since the above examples are right-branching. Given that two argument slots cannot be both filled within the anterior constituent, a Finnish compound like *yhditys+kirja+lahjoitus* 'society+book+donate-dn' cannot mean 'society's book donation' or 'book donation for a society', but only 'the donation of a society book'.

Finally, the book does not give an unambiguous answer to the question raised in the title of this chapter: the moral is exactly that the answer to that question depends on the way one looks at grammar as a whole.

The second article ('Compounds in Finnish: on the morpho-syntactic and semantic criteria', 61–127) is the most extensive one: it takes up one-third of the volume. It is an empirical grammatical description of Finnish compounding. The category of compounds is a fairly heterogeneous one; hence it does not have clear defining criteria. Since definitions like 'a compound is a word that consists of two words' highly depend on the concept of 'word', one has to find criteria that avoid the use of that concept. Mäkisalo tries to describe compounds primarily on the basis of their prototypical instances—he follows Ryder (1994) in that respect who claims that prototypical compounds can be best accounted for in terms of the prototypical semantic relations between their constituents.

Mäkisalo takes lexical, morphological and syntactic criteria and supplements them with semantic ones. Phonological (prosodic) criteria are ignored because they do not fit into the theoretical bases and methods of his research. Referring to Kalevi Wiik, the author claims that in Finnish (and in general, in languages where its assignment is automatic and fixed) the role of stress is the signalisation of word boundaries—since compounds are single words, they have a single main stress. Later, however, he goes on to point out that vowel harmony fails to apply across the constituents of a compound because there is a word boundary between them. The contradiction is never resolved, even if it is relatively simple to do that: 'word' means different things in the various components of phonology (or: two different domains are readily referred to by the term 'word').

The corpus investigated is a relatively small body of spoken utterances taken from radio interviews, coloured by dialectal features (primarily phonological ones). The material includes 756 constructions that satisfy some criterion of being a compound.

The author conducted a preliminary test before embarking on the investigation proper, in which he tried to find out, on the basis of speakers' intuitions, what constructions are felt to be compounds in spoken language. From the transcript of one of the interviews he removed all spaces and punctuation, he replaced capital letters with lower case ones, and asked his subjects to indicate word boundaries. Since Finnish spelling has all compounds spelt solid, it was expected that subjects would fail to insert a word boundary between constituents of compounds. (The reviewer has strong reservations about that method. First, he doubts if speakers have innate intuitions—or ones acquired in parallel with language acquisition—concerning concepts like 'compound', or

even 'word'. But even if they do, it is highly likely that learning to write overwrites those intuitions: whereas the rule says we write solid ('as one word') whatever is one word, in reality, rather, whatever is spelt solid is called a word. Subjects who are relatively well-versed in orthography will indicate word boundaries where the spelling has a space.)

If compounds (in particular, constructions that at least two subjects considered to be single words) are classified in terms of their syntactic category and morphological makeup, we can observe the existence of three distinct groups: one comprises constructions that were taken to be single words by 71–99% of subjects (N+N, N+A, A+A, A+N, PRON+A, N+NUM, NUM+NUM, ADV+PSP);³ the next consists of items that were taken to be words by 34–52% (NUM+N, NUM+A, ADV+V, ADV+ADV); and the third group (PRON+N, PRON+ADV, V+CS, ADV+CS, CC+CS, A+V, PSP+PRON) is that of constructions that were taken to be compounds by a mere 9–18% of the subjects. The groups are not all homogeneous: for instance, NUM+N got into the middle group due to the single item *tuhannesosa* 'one-thousandth (part)'.

The most important result of the preliminary test is that it is sufficient to analyse the syntactic and morphological structure of the compounds in order to define the various types of compounds: prosody or discourse features can safely be ignored although this does not mean that compounds do not have features of these two types. The preliminary test also demonstrated that compounds of the structure N+N, A+N, N+A, and A+A can be taken to be prototypical,⁴ these are frequent and their evaluation by language users is unambiguous.

In the main investigation, Mäkisalo uses the following as criteria of compoundhood: 1. the item should be lexicalised; 2. it should consist of two free morphemes; 3. the order of constituents should be fixed; 4. constituents should not be morphologically separable; 5. the semantic relation between constituents should be determined by the posterior constituent, which should be 6. the head of the construction, 7. preceded by the anterior constituent on a general reading; 8. the compound as a whole should be able to figure as the head of another compound; 9. only the posterior constituent should participate in syntactic agreement; and 10. the compound should constitute an anaphoric island, i.e., the anterior constituent should not be possible to refer back to.⁵

In order to measure lexicalisation, Mäkisalo uses a rather crude method: he takes a compound to be lexicalised if it occurs in *Suomen kielen perussanakirja* (SKPS, Basic Dictionary of Finnish). He himself points out though that a word not appearing in the dictionary may well be a lexeme of the language; however, the reviewer thinks it is just as important to emphasise the converse. In Finnish, there is no limitation to producing compounds whose anterior constituent is an adjective referring to some nation or ethnic group and whose posterior constituent is a noun or adjective. Many of these can be found in SKPS: *suomalaiskansallinen* 'of Finnish citizen-

³ PSP = postposition, CC = conjunction of coordination, CS = conjunction of subordination.

⁴ Mäkisalo also mentions the type N+V although such items did not figure in the survey. Perhaps a misprint?

⁵ On pages 108–109, the numbering of the criteria differs from that given here, but this is the only way the reviewer can make any sense of the list, and he suspects that there must be some technical glitch there.

ship', *suomalaisperäinen* 'of Finnish origin', *ruotsalaissyntyinen* 'Swedish by birth', *ruotsalaissseutu* 'Swedish(-inhabited) region'. Similarly productive are combinations of a name of a language in the genitive with the adjective *kielinen* '-speaking' as in *vironkielinen* 'Estonian-speaking', *ruotsinkielinen* 'Swedish-speaking', *suomenkielinen* 'Finnish-speaking', etc. Also, a mass noun in the nominative as an anterior constituent also yields a productive pattern of compounding; many of these (*rautapannu* 'iron pan', *rautapata* 'iron pot', *puuhuonekalu* 'wooden furniture', *puujäte* 'wood waste', *kiviaita* 'stone wall', *kivijalusta* 'stone pediment', and many others) occur in the dictionary without any explanation. The meanings of these can be unambiguously inferred from those of the constituents and the structure they appear in, therefore, we do not have to assume that they are lexicalised.

Of the criteria cited, that concerning the head of the construction may stand in need of clarification. In this case, distributional equivalence is required, that is, the compound and its posterior constituent on its own should be insertable into the same contexts. The requirement that the anterior constituent should have a general reading means that the anterior constituent may never refer to some definite entity: *student film society* does not refer to either particular student(s) or specific film(s); *ilta+hämärä* 'evening+twilight' means 'twilight' in general, whereas the corresponding phrase *illan hämärä* 'evening-gen twilight' means 'twilight this evening'. Compounding is typically recursive in the sense that a compound may figure as an anterior or posterior constituent of another compound. However, a syntactic phrase can also occur as an anterior constituent (e.g., *tee itse -mies* 'do it self + man = do-it-yourself-man (jack-of-all-trades)') but not as a posterior constituent; that is why it is one of the criteria of compoundhood that a compound should be able to become the head of another compound.

Compounds are in general anaphoric islands, i.e., the anterior constituent cannot be referred back to. In Finnish, however, there are a few examples that seem to contradict this. For instance, this is the case where a plural anaphor excludes any other possible reading: *?Miten tuo hirsi+seinä on noin harmaa, vaikka ne on vasta viime kesänä on hiotettu?* 'Why is that log wall so grey, even though they [the logs] were polished only last summer?'; *Paperi on kyllä nelin+kertainen. ?Minä ihan laskin niin monta.* 'Yes, the paper is four-layer. I also counted that many.' The examples are given by Mäkisalo himself with a question mark, and at the end of the article he rather thinks that these cases are made possible only by the fact that the pronoun cannot be interpreted otherwise in these sentences.

With respect to the criterion that it is only the posterior constituent that carries agreement in the syntax, we have to point out that in Finnish there are A+N compounds whose anterior constituent, just like an ordinary adjectival modifier, carries agreement markers, e.g., *isoviha* 'the great hatred = a Swedish-Russian war of the 18th century', genitive: *isonvihan*, inessive: *isossavihassa*, etc. That this is not simply a case of an idiomatic modified noun phrase is supported by compound stress. Mäkisalo does not mention this type, perhaps because it does not occur in his corpus.

In the 8026-word corpus, he finds 543 compounds of which he claims 356 to be lexemes. In the text, it is stated that 313 of these are two-constituent compounds (multiple compounds are ignored in the analysis), yet the corresponding table has the summary figure 344, and if we check the addition in the table, we get 333. The table shows how many of the lexicalised compounds satisfy the criteria of compoundhood. More than ninety per cent of nominative-initial N/DV/A+DV, A+N, DV+N, N+N

compounds satisfy all the criteria; 70% of A+A compounds and 63.6% of N+A compounds also do so. A mere 50% of genitive-initial N+gen+N compounds, and none of the N+gen+DV compounds satisfy all criteria. Similarly, no compound numerals, adverbs, conjunctions or postpositions satisfy all of the criteria; it is easy to guess they would not since their posterior constituent is not the semantic head of the construction (except for round numbers — but then, these cannot be heads of new compounds).⁶ These are referred to by Mäkisalo as 'marginal types of compounds'.

On the other hand, the behaviour of genitive-initial compounds calls for an explanation. Mäkisalo claims that they fail to satisfy the criterion of fixed order, e.g., *aasin+nahka* 'donkey-gen+skin/leather = donkey skin', *nahka aasin* 'skin donkey-gen = skin of a donkey', *kallion+laki* 'rock/hill-gen+top = hill top', *laki kallion* 'top hill-gen = top of a hill'. However, Mäkisalo himself notes that by reversing the order of constituents, the original anterior constituent loses its general reading: in the view of this reviewer, this fact in itself proves that this is not a case of reversible compound constituents but rather that of reversible portions of a similar possessive construction. Although the author gives us examples where the anterior constituent has a specific reading in the original compound (*tästä kumpareelta*, *kallionlaelta avautuu Hoilolan kylä* 'it is from this knoll, the top of the hill, that Hoilola village opens before our eyes'), the reviewer thinks what has a specific reading here is the compound: that is why the referent of the anterior constituent can be 'pointed at' while it is in fact of a general reading. The examples in which the anterior constituent is a proper noun are more persuasive, but the fact the proper noun initial compounds behave in a peculiar manner is not surprising in itself.

Turning to deverbal-final compounds, the author claims that they are mostly genitive-initial where the anterior constituent is an argument, and are mostly nominative-initial if it is an adjunct. In the preliminary part he shows that the verbal argument structure is there even if it is not a matter of deverbal derivation but the verb and the corresponding noun share a common stem (*linnun+laulu* 'bird song', cf. *lintu laulaa* 'a bird sings'), or the verb is derived from the noun: *maailman+valta* 'world power' vs. *vallita maailmaa* 'rule the world', *huumorin+taju* 'sense of humour' vs. *tajuta huumoria* 'understand humour'. That the situation is not that simple is shown by Mäkisalo's own examples a few pages earlier: *uskon+riita* 'faith-gen+quarrel = religious controversy' with a genitive anterior constituent but *raja+riita* 'border+quarrel = border conflict', *kieli+riita* 'language+quarrel = language debate' with a nominative anterior constituent — all of these are related to the verb *riidella* 'quarrel'. Also, *eläin+kuljetus* 'animal+drive/transport-dn = animal transportation', mentioned in the fifth article, can be related to the verb *kuljettaa* just like one of the author's favourite examples, *auton+kuljettaja* 'car driver', yet whereas the anterior constituent of the former is in

⁶ It appears that the author is not consistent on this point since, in terms of his own definition of heads, substitutability would be the criterion of headship, and that would undoubtedly be true of numbers like *kaksi* '2', *kaksikymmentäkaksi* '22', *sataviisikymmentäkaksi* '152', etc.: wherever the numeral ends in *kaksi* '2', that constituent is the head. The only problem is that nominals that follow *yksi* '1' are in the nominative singular, whereas those that follow *kaksikymmentäyksi* '21', *sataviisikymmentäyksi* '151', etc. are in the partitive singular, just like after any cardinal number other than *yksi* '1', hence in this case there is no distributional equivalence. Still, recursivity in this sense is always there, except for *yksi* '1'.

the nominative (*n* is not a genitive marker in it), that of the latter is in the genitive. Mäkisalo does not explore the distribution of anterior constituents in terms of the derivational suffixes of posterior constituents, even if that would be a telling enterprise.

The semantic relations between constituents of endocentric root compounds is investigated on the basis of Pustejovsky's (1991) ideas, although the latter's classification is criticised by Mäkisalo. The reviewer, in turn, does not find Mäkisalo's classificatory labels satisfactory in all cases; for instance, the semantic type of the anterior constituents in *aasin+nahka* 'donkey-gen+skin = donkey skin', *kallion+laki* 'rock-gen+top = top of the rock' he would not call 'orientation', and those of *ulko+puolinen* 'out(side)+half-adj = outsider',⁷ *ala+kerta* 'down+floor = downstairs' are not adjectives since without a derivational suffix they exclusively occur as anterior constituents of compounds (in addition to the former occurring as an adverb stem and the latter serving as a postposition stem), but on the whole, the validity of the results will not be questioned here.

At the end, Mäkisalo returns to the main issue of the first article, and draws the following conclusions: 1. Internal inflection is indeed an internal process going on in parallel with compounding since for synthetic compounds it is required by the verb stem in the posterior constituent and for root compounds by the semantic relation between the constituents. Consequently, the internal inflection of a compound cannot be due to a syntactic operation. 2. The character of internal inflection within synthetic compounds also suggests that it is lexically rather than syntactically motivated: it only has two categories: genitive and non-genitive (nominative, involving a consonantal stem), and the genitive signals that the anterior constituent belongs to the core of the logical structure of the verb, whereas the non-genitive signals that it belongs to its periphery. Given that all this depends on the lexical structure of the verb, we cannot say this is syntactic marking, either. 3. Some syntax, nevertheless, may be involved in compounding since in certain peripheral cases the anterior constituent can be referred back to, even if this is perhaps only made possible by the necessity of interpretation. 4. Another property of genitive-initial compounds suggests that they involve some syntax: enclitics can appear between the two constituents, e.g., *aasin+kin+nahka* 'donkey+too+skin = (the) donkey skin, too (as well as skins of other animals)'. In sum, on the basis of his investigation of Finnish compounds, he claims — in contradiction to what he said in the introduction — that compounding belongs (more or less) to morphology, after all.

At this point, however, the reviewer cannot help mentioning that there is a phenomenon in Finnish suggesting that the inflection of anterior compound constituents is relevant for the syntax. To illustrate this, the compounds *lapsenlapsi* 'child-sg.gen+child' and *lastenlapsi* 'child-pl.gen+child', both meaning 'grandchild' are the most appropriate examples. Both constructions are compounds: they are stressed as compounds, the anterior constituent cannot get an attributive modifier of its own, and it cannot be supplied with a possessive suffix, whereas in phrases of a similar structure this is possible. But *lastenlapsi* can only be used if children of someone's several children are meant; indeed, it practically cannot be used in the singular since that would suggest that two of someone's children are both parents of the same grandchild, a case of incest. Sentences like *Minulla on yksi lapsi, mutta viisi lastenlasta* 'I've one child

⁷ The gloss 'outsider' as given by Mäkisalo suggests a noun rather than an adjective; but the word has adjectival meanings like 'outer, outside' as well.

but five grandchildren (i.e., five children of my **children**)' are also semantically anomalous. Even when used in the plural, *lastenlapsi* differs from *lapsenlapsi*: *Lapsenlapseni ovat pihassa* 'My grandchildren (all of them children of the same child of mine) are in the courtyard' vs. *Lastenlapseni ovan pihassa* 'My grandchildren (who are children of at least two of my children) are in the courtyard'. In this respect, then, compounds behave exactly like phrases of the same kind do. Another type that Mäkisalo does not take into consideration comprises compounds whose anterior constituent is in some other case (not in the nominative and not in the genitive). Although these are less frequent and more peripheral, it cannot be stated that the inflection of anterior constituents has only two categories.

In the third article ('Semantic transparency, frequency and linear order of constituents in Finnish compounds',⁸ 129–61) Mäkisalo describes a series of experiments. With the help of morphological and semantic priming, he explores whether, in speech comprehension, Finnish listeners analyse compounds into constituents or comprehend them as wholes.

In the first part of the paper, Mäkisalo surveys similar experiments described in the literature and their results. For the investigation of Finnish compounds, Mäkisalo selected three main aspects: the transparency of compounds, their frequency (respectively, that of their constituents), as well as whether the target coincides with the anterior or the posterior constituent.

The first experiment explored morphological priming and its most important result is that frequent compounds obviously do have a priming effect, whereas semantic transparency and priming with just one of the constituents yield results that are difficult to interpret. In cases of priming with the anterior constituent only, frequency and transparency play a major role, whereas in cases of priming with the posterior constituent, they do not. In other words: differences in transparency make opposite effects for frequent and for rare compounds: for frequent compounds, an opaque anterior constituent increases reaction time but an opaque posterior constituent decreases it; whereas for rare compounds, opaque constituents invariably increase reaction time but it is exactly as posterior constituents that they do so to a larger extent. Semantic transparency or the issue of which constituent is used for priming do not have a significant effect.

The second experiment studied semantic priming. Semantic priming has a slower effect than morphological priming does, and the effects are also different. Frequent compounds are always analysed, except when neither constituent is motivated. The results are unclear for rare compounds, only one thing is certain: compounds consisting of unmotivated constituents are not analysed here, either.

The experiment described in the fourth article ('Finnish compound structure: Experiments with a morphologically impaired patient',⁹ 163–70) explores the access codes of Finnish compounds and the effects of structure (headship) in one patient (HH—monolingual Finnish man whose left hemisphere was damaged in an accident in the mid-eighties and who has severe Broca's aphasia and dyslexia). HH is sensitive to morphological categories: in oral reading and repetition tasks, he makes more errors in

⁸ An earlier version of this paper was presented at the Seventh International Morphology Meeting in February 1996, in Vienna.

⁹ Co-authors: Jussi Niemi and Matti Laine. The paper was published previously as Mäkisalo *et al.* (1999).

inflected than in derived forms. The aim of the paper was to find out what difficulties were involved in reading compounds as compared to reading monomorphemic or derived forms. The other aim was to see if the roles of anterior constituents (nonheads) and posterior constituents (heads) were different in lexical access.

According to the results of the experiment, reading out compounds was extremely difficult for HH. In cases where compounds were misread, HH nearly always uttered another compound — but he never substituted a compound for a derived or a monomorphemic item.

The number of misread anterior and posterior constituents differed to an insignificant extent only; on the other hand, whenever the anterior constituent was read correctly, HH uttered an existing compound instead of the target item, e.g., *raja+pykki* 'boundary+post = boundary stone' for *raja+joki* 'boundary+river = boundary river'. In the opposite case — when the posterior constituent was read correctly — this happened a lot less often: the compound he uttered was either a neologism or semantically strange or absurd. The authors concluded that the anterior constituent had a key role in lexical access to compounds.

The authors emphasise that certain phenomena may be reading-specific. In picture naming tasks, compounds would be expected to be easier to access than derived words would as they are more informative. It is also possible that the difficulty with compounds is merely that they include two stems whereas derived words only include one.

As a conclusion, the authors formulate the assumption that, after morphological analysis, it is the anterior constituent that directs lexical access; and if the target compound is not lexicalised, another compound emerges ready-made from the lexicon. If only the posterior constituent can be accessed, the creation of another compound fails, presumably due to the special role of the head at the semantic level — exactly the level at which HH turned out to be damaged.

The fifth article ('Verb effect in Finnish deverbal compounds: A case study with an agrammatic',¹⁰ 171–9) presents another experiment with HH. Earlier, Laine had found that syntactic categories influenced HH's reading ability: he erred more for verbs than for adjectives or nouns, and he erred the most often in connection with the closed word classes.

At the end of the preceding paper, the authors assumed that at the semantic level the main role was played by the posterior constituent (the head). Since, in the case of synthetic compounds, the semantic role of the anterior constituent is determined by the verb stem in the posterior constituent, it is reasonable to expect that recognising the verbal posterior constituent would facilitate recognition of the whole compound.

The results of the experiment show that HH erred a lot more with respect to synthetic than to root compounds (72% vs. 57%). This is roughly proportionate to the difference Laine had found between monomorphemic verbs and nouns (45% vs. 30%). Comparing error rates of compounds with various inflections on their anterior constituents, it becomes evident that what accounts for the differences in the number of errors is the syntactic category involved, not the diverse inflections. What is more, if we compare the error rates of compounds with internal inflection with those of inflected single-stem items, it turns out that HH had a lot fewer problems with the former than

¹⁰ Co-author: Matti Laine. The paper was published previously as Mäkisalo – Laine (1998).

with the latter. On the other hand, it has to be noted that there were incorrect responses in which the genitive suffix was omitted from the anterior constituent but none in which a neologistic compound had a genitive marker in it. The subject was unable to read correctly any of the locative-initial compounds. He substituted nominal and deverbal compounds, as well as genitive-initial and nominative-initial ones, by some other compound in roughly the same proportion, another argument in support of the claim that these constructions are of a similar makeup.

In summary, it can be said that Mäkisalo's work constitutes a very important step forward in the research on Finnish compounding. The critical remarks made here are not meant to question these results, but rather to modulate them. It has to be noted finally that the volume would have deserved more careful editorial work; occasional contradictions in numerical data, deficiencies in the bibliography, and the occurrence of sense-distorting misprints make the use of this book more difficult than it should be.

László Fejes

References

- Allen, Margaret R. 1979. Morphological investigations. University Microfilms International, Ann Arbor MI.
- Grimshaw, Jane 1990. Argument structure. Linguistic Inquiry Monographs 18. The MIT Press, Cambridge MA.
- Mäkisalo, Jukka – Matti Laine 1998. Verb effect in Finnish deverbal compounds: A case study with an agrammatic. In: M. Nenonen – J. Järvikivi (eds): Language, minds, and brains: Papers from the NorFa Summer School, Mekrijärvi, Finland, June 22–29, 1998, 116–21.
- Mäkisalo, Jukka – Jussi Niemi – Matti Laine 1999. Compound structure in Finnish: Experiments with a morphologically impaired patient. In: Brain and Language 68: 249–53.
- Pustejovsky, James 1991. The generative lexicon. In: Computational Linguistics 17: 409–41.
- Ryder, M.-E. 1994. Ordered chaos. The interpretation of English noun-noun compounds. University of California Publications, vol. 123. University of California, Berkeley CA.

Erzsébet Fehér: A szövegkutatás megalapozása a magyar nyelvészetben [L'instauration des recherches textologiques dans la linguistique hongroise]. Nyelvtudományi Értekezések 147. Akadémiai Kiadó, Budapest, 2000, 87 pp.

Le but avoué d'Erzsébet Fehér est très modeste : elle voudrait seulement aider à s'orienter au sein de cette branche dynamique de la linguistique. Or, ce livre, portant le sous-titre « Esquisse de l'histoire de la discipline », est plus qu'une présentation, c'est une véritable analyse. L'auteur considère que c'est l'analyse historique qui convient le mieux pour avoir une bonne vue d'ensemble, car « c'est seulement l'approche historique qui peut donner des explications de l'existence simultanée des trois branches de la textologie et de leur origine » (5).

Acta Linguistica Hungarica 51, 2004

Erzsébet Fehér indique exactement les limites de son approche. Les points de repère les plus importants de son livre sont les suivants : les commencements de la textologie hongroise, son instauration théorique grâce à la réception hongroise des théories modernes de la linguistique, ses relations interdisciplinaires, ses directions, ses objets de recherche, ses sources les plus importantes, les théories de l'essence du texte.

Dans son oeuvre, l'auteur établit quatre grande unités. Dans le premier chapitre, « Polémiques et le commencement des recherches textologiques dans la linguistique hongroise », elle passe en revue les polémiques concernant les nouvelles méthodes des recherches linguistiques et elle montre comment les discussions ont contribué à la naissance d'une linguistique plus théorique.

Dans la deuxième partie de ce chapitre — intitulée « Les débuts de la textologie dans la linguistique hongroise » —, elle applique simultanément l'analyse chronologique et l'analyse thématique. Le point de départ de la tendance la plus ancienne était l'étude d'Ilona H. Molnár (1956), sur les phrases commençant par la conjonction *de*. L'auteur considère Ilona H. Molnár comme la fondatrice de la tendance constructionnelle basée sur l'idée du rôle central de la phrase.

Erzsébet Fehér rattache la branche la plus féconde de la textologie hongroise à la tendance fonctionnelle dont le fondateur est László Deme. Elle apprécie le point de vue fonctionnel de László Deme, selon lequel l'étendue et la structure du texte sont définies par le rôle communicatif, les limites ne se fondant pas sur des critères formels.

Erzsébet Fehér trouve que la troisième branche de la textologie linguistique est l'atelier sémiotique des germanistes de Szeged où l'interpénétration des aspects formels et fonctionnels a donné des résultats théoriques dans le domaine de l'analyse des formes simples. Grâce à cette tendance, l'attention des chercheurs s'est tournée vers les types de texte.

Pour caractériser la succession des tendances en recherches textuelles l'auteur dit : « Ce processus va de l'analyse des significations non-linéaires basées sur la relation linéaire des phrases à la définition du texte comme unité communicative, pour arriver à la reconnaissance du type de texte comme structure cognitive d'origine socio-culturelle définie par des conditions pragmatiques » (28).

Dans le deuxième chapitre, Erzsébet Fehér présente « La place des recherches textologiques dans le système des sciences et leurs bases théoriques ». Elle cherche les frontières entre la linguistique et ses sciences auxiliaires, les relations qui s'établissent entre elles. L'auteur identifie les sciences auxiliaires de la textologie selon deux principes : d'une part, elle définit les sciences qui peuvent fonctionner comme des sciences auxiliaires, d'autre part, elle cherche à établir l'utilité de chacune de ces sciences pour la textologie.

Dans le sous-chapitre « La construction de l'arrière-plan théorique », Erzsébet Fehér n'entreprend pas une présentation même schématique des théories en question — comme elle l'avou sincèrement — ; elle ne veut en présenter que la réception hongroise et les aspects textologiques. D'abord elle présente la réception de la sémiotique en Hongrie. Elle établit un parallèle entre la sémiotique et la textologie selon les principes suivants : les répétitions sémantiques et les unités sémantiques en coréférence constituent les principes organisateurs du texte ; on peut interpréter la structure du texte comme un « monde possible » ; l'autonomie des textes particuliers est partielle parce qu'elle a des relations avec d'autres systèmes très divers.

Erzsébet Fehér montre clairement dans son étude comment la pragmatique, étant à la fois une théorie et une méthode, peut toucher plusieurs problèmes des recherches

linguistiques, et comment le tournant pragmatique, qui a eu lieu en Hongrie dans les années '80, c'est-à-dire les théories décisives de la pragmatique linguistique, comme la théorie des actes de langage, la théorie des interactions et leurs effets sémantiques et sociolinguistiques, ont pu influencer le développement de la textologie hongroise. Selon l'auteur, ce que les théories pragmatiques ont le plus influencé, ce sont les conceptions concernant la signification, de sorte que les problèmes sémantique se retrouvent au premier plan, notamment la distinction entre signification sémantique et signification pragmatique, ou encore entre différentes couches de signification.

Dans le deuxième sous-chapitre du deuxième chapitre, « Étendue et type de l'unité linguistique étudiée par la textologie », l'auteur pose deux questions importantes pour l'objet des recherches textologiques et pour l'applicabilité des théories pragmatiques : quels sont les faits linguistiques appartenant à l'usage quotidien, comment les points de vue de la pragmatique peuvent se manifester dans l'usage, qu'il s'agisse de la communication directe ou indirecte.

Erzsébet Fehér montre, sous l'influence des conceptions scientifiques récentes, que le problème du texte comme unité linguistique plus grande que la phrase apparaît de deux manières. D'une part, l'exposé de Ferenc Kiefer (1975) décrit les tendances dans les recherches sémantiques et ses études sur ce thème (1976, 1979) posent des questions importantes pour la textologie : quelles sont les propriétés par lesquelles une phrase peut devenir texte ; quelle est la différence entre un amas de phrases et un texte cohérent ayant un sens, comment la coordination peut diverger dans la phrase complexe et dans la séquence des phrases du texte. D'autre part, le texte fait partie des préoccupations de la psycholinguistique, et cela de deux points de vue : d'abord comme un produit linguistique qui nous permet d'étudier le fonctionnement de la mémoire et de la compréhension, puis comme une production linguistique qui se réalise dans une situation particulière, ce qui nous permet d'envisager le processus de l'utilisation de la langue. Erzsébet Fehér considère comme très importantes les recherches de Csaba Pléh (1980) parce qu'elles prouvent que le texte est une unité sémantique alors que le type de texte a toujours un caractère cognitif.

Erzsébet Fehér fait remarquer que l'analyse de la conversation, du dialogue et du discours spontanés, est aussi développée sous l'influence de la pragmatique linguistique, mais elle précise qu'en ce domaine, les notions ne sont pas encore bien définies, or la relation entre les notions telles que conversation, dialogue et discours n'est pas indifférente du point de vue de l'objet de la textologie. L'auteur laisse prévoir que l'approche pragmatique se généralisera et que l'on se dirige vers la disjonction entre analyse de texte et analyse de conversation.

Dans le troisième chapitre « Objets et tendances de la textologie linguistique hongroise », l'auteur propose des critères pour distinguer les tendances de la textologie. Ces critères sont les suivants : 1. la conception de l'essence de texte ; 2. le type de texte qui est l'objet des recherches ; 3. l'aspect analysé du phénomène textuel ; 4. la méthode appliquée au cours de l'analyse ; 5. l'étendue du concept du texte étudié par une discipline spéciale ou par tout un ensemble de sciences ; 6. l'interprétation du rôle de la textologie linguistique. On peut être d'accord avec l'auteur, qui affirme que selon ces points de vue, on peut à la fois définir les caractéristiques des méthodes d'analyse textuelle et distinguer la textologie linguistique et la textologie non-linguistique.

Par la suite, dans le sous-chapitre « Tendances et relations interdisciplinaires » Erzsébet Fehér distingue, d'après les critères énumérés ci-dessus, les interprétations plus restreintes et plus larges de la textologie. Pour mieux faire cette distinction, elle

s'inspire des différentes dénominations de la discipline (théorie du texte, linguistique du texte, science du texte, étude du texte, grammaire du texte, textologie, textologie sémiotique). Elle propose de réfléchir sur l'usage du terme « textologie » devenu ambigu, et de le remplacer par « linguistique du texte ».

Dans le troisième chapitre (sous-chapitre « Domaines et sources de la linguistique du texte en Hongrie »), l'auteur présente que dans l'histoire de la discipline, l'on peut décrire les modes d'approche du texte par deux dichotomies : analyse constructionnelle ou analyse fonctionnelle ; méthode inductive ou méthode déductive (description de l'organisation textuelle à partir des phrases, ou examen des constituants à partir de l'ensemble textuel), dans les études hongroises, ces analyses se recoupent très souvent. Sur ces bases, Erzsébet Fehér distingue trois types au sein de la textologie hongroise.

Les recherches d'Imre Békési envisagent l'organisation du texte d'une façon déductive, concernant les types sémantico-logiques de sa construction ; ces recherches portent sur des textes qui ne contiennent qu'un seul paragraphe, sur les faits divers (1976, 1979, 1982), et sur les textes argumentatifs (1986). Parmi les études de caractère déductif, citons aussi l'analyse pragmatique de Békési (1993), et les recherches de László Antal sur les rapports entre types d'énoncés et organisation textuelle (1976, 1979). Par l'autre méthode, les chercheurs présentent le texte à partir de ses constituants, les phrases, et ils distinguent plusieurs procédés cohésifs. La synthèse de ces deux approches se réalise par l'analyse du rapport entre la thématique textuelle et l'organisation textuelle. On citera ici les études de Zoltán Bánréti (1979) qui ont montré qu'on pouvait découvrir les éléments de la thématique à travers le déroulement du texte organisé en rapportant le fait exprimé par le groupe nominal anaphorique aux assertions contenues dans les segments textuels antérieurs ; on peut relier l'organisation thématique aux modèles du monde construits par le locuteur.

La plupart des études textologiques ont paru dans des revues ; effectivement, peu de travaux sont considérés par Erzsébet Fehér comme des ouvrages de synthèse (Ferenc Nagy 1981, Paul Schweiger 1982, János Balázs 1985, Tamás Terestyéni 1992, Irma Szikszai-Nagy 1999). Elle souligne l'importance de ces dernières études en ces termes : « Les synthèses textologiques indiquent le chemin que la textologie hongroise a parcouru en partant de la conception fondée sur le rôle central de la phrase pour arriver à une interprétation multidisciplinaire de son objet. Dans les études récentes, on voit se dessiner les tendances de l'évolution future vers la constitution d'une méta-science générale à structure modulaire et vers une science linguistique interdisciplinaire de la communication » (72).

Dans le quatrième chapitre : « Conclusion et perspectives », l'auteur pose une question importante : Quel est l'avenir des recherches textologiques ? En accord avec Beaugrande, elle prévoit les tendances suivantes : si on interprète le texte non seulement comme une unité linguistique mais comme une unité communicative, il faudra en tirer des conséquences pour les théories de la compréhension, de l'action et de l'interaction ; il sera nécessaire de reconnaître le caractère interdisciplinaire de l'objet, et de construire une méta-science textologique ; on devra soumettre à l'analyse les faits linguistiques naturels, et maintenir l'équilibre des méthodes analytique et synthétique ; l'analyse selon les niveaux ne peut pas être productive ; l'analyse du texte ne peut être efficace qu'au prix d'une approche complexe qui tient compte des types de texte, il est donc indispensable d'élaborer un cadre théorique cohérent. Mais avant tout — dit l'auteur — il faut réinterpréter les relations interdisciplinaires de la textologie.

L'apport le plus important de l'excellent ouvrage d'Erzsébet Fehér, c'est que l'auteur présente les tendances les plus significatives de la textologie hongroise sous l'angle de la diachronie. Erzsébet Fehér enregistre avec un discernement remarquable les constatations et les conclusions novatrices des travaux essentiels et par là-même, elle suggère de nouvelles orientations pour les futures recherches.

Irma Szikszai-Nagy

Heinrich Werner: Vergleichendes Wörterbuch der Jenissej-Sprachen I–III. Harrasowitz Verlag, Wiesbaden, 2002, 483 + 444 + 449 pp.

Harrasowitz has published another work about which we can say with good reason that it fills a gap, in spite of the fact that this is not the only comparative dictionary of the Yenisei languages. The first dictionary of that kind was written by S. Starostin (published in 1995). However, a tremendous amount of new material has been collected recently, which has made it possible to publish an overall comparative work.

Heinrich Werner has been working on Yenisei languages for a long time, as is shown by his monographs published in succession in the 90s: *Das Klassensystem in den Jenissej-Sprachen* = Veröffentlichungen der Societas Uralo-Altaica 40, Wiesbaden, 1994; *Vergleichende Akzentologie der Jenissej-Sprachen* = Veröffentlichungen der Societas Uralo-Altaica 46, Wiesbaden, 1996; *Die ketische Sprache* = Tunguso-Sibirica 3, Wiesbaden, 1997; *Die Jugische (Sym-Ketische)* = Veröffentlichungen der Societas Uralo-Altaica 50, Wiesbaden, 1997; *Abriß der kottischen Grammatik* = Tunguso-Sibirica 4, Wiesbaden, 1997; *Probleme der Wortbildung in den Jenissej-Sprachen* = Lincom Studies in Asian Linguistics 25, München / Newcastle, Lincom Europa, 1998. As can be seen in the list, Heinrich Werner has been dealing with the Yenisei languages for many years, not only from a descriptive but also from a comparative point of view. We can regard the three-volume dictionary under review as a summary of his research.

Nowadays the Yenisei languages are classified as belonging to Paleo-Siberian languages. However, it is generally known that not all Paleo-Siberian languages are genetically related. As their name suggests, in this case the focus is on territorial localisation, so some smaller “language families” and isolated languages are included here. Here we can find Chukch-Kamchadal languages (e.g., Chukch, Koryak, Kamchadal etc.), Aleut-Eskimo languages, and two genetically isolated languages (Yukagir and Nivh), together with the Yenisei languages.

Among the Yenisei languages only Ket is spoken today, by approximately 600 people. While Assan, Arin and Pumpokol disappeared already in the 18th century, Kott was spoken until the middle of the 19th century. The travellers and explorers of the great Siberian expeditions, such as Strahlenberg, Müller, Gmelin, Pallas etc., also reported on these languages. The last Kott linguistic data are known from Castrén's notes. In the 20th century two other languages were still spoken: Jug (Sym) and Ket. The extinction of Jug may have happened in the 80s.¹ Of course, in processing

¹ This language may have disappeared in the last decades only; indeed, it is considered to be a living language by some of the handbooks published recently, e.g., *A világ nyelvei*, Akadémiai Kiadó, Budapest, 1998, p. 1162. The authors of this review do not want (and are not able) to take sides in this issue.

data on extinct languages Heinrich Werner also used the notes mentioned above. On the other hand, a considerable part of the Ket and Jug data constitutes the author's own collection. Werner was doing fieldwork along the River Yenisei for over 30 years. The basis of the dictionary is the material collected during Werner's fieldwork, an important virtue of this dictionary.

Werner's dictionary consists of three volumes. In the introductory part of Vol. 1 we get a brief survey of the Yenisei languages and the history of research on them (1–4), the guidelines to the use of the dictionary and the transcription system employed (4–8), as well as the list of abbreviations (9–10). This volume contains the entries of the dictionary from *A* to *K* (11–483). The rest of the entries can be found in the second volume. The third volume is devoted to results of onomastic research, and a brief grammatical sketch.

The entries have the following structure. The head-words of the entries come from the southern dialect of the Ket language, we only find a head-word taken from another dialect or even another language if the word does not exist in (the southern dialect of) Ket. Of course, in that case the author gives the language or the dialect involved and the source of the head-word (e.g., *abayit* (mket. D) 'es haart' (vom Fell) — Central-Ket, following Dulzon).

It results from the morphological character of the Yenisei languages that it is not enough to give the head-word and its meaning, further morphological information is needed: in the case of nouns, the plural form and gender (e.g., *hittin* «n, Pl. *hittineŋ* 'Leintopf'). The verbs require an even more elaborate presentation because the complicated conjugation system — where conjugation and derivation often fuse — makes it necessary that the user of the dictionary should be given the type of conjugation of the verb in question. This problem is solved by listing some inflected forms, which help the reader to define the inflection type. In the case of irregular verbs, the entries include the whole paradigm. However, this process presumes that the user of the dictionary is familiar with the Yenisei languages to some extent or at least that he has surveyed the grammar in the third volume thoroughly.

At the end of several entries some accessory information can also be found (cross-references, the origin of the word, etc.), e.g., *âru* (Kot. C) 'hinterlistig' < Tü. *oryy*, *oryr*, *uru* 'Dieb' (?). In the case of Proto-Yenisei forms (PJ) Werner transcribes the undefinable vowel as *ə* instead of one of the commonly used symbols (e.g., PJ **ajgən* 'Luchs'). This is not too felicitous, because in Yenisei forms this symbol stands for a mid central vowel (e.g., *akkət* 'Donnerkinder'). This notation is very confusing.

The third volume, in addition to a rich bibliography (148–162), a German–Yenisei (163–306) and an English–Yenisei (307–449) index, contains useful information for those interested in onomastic research (Onomastik, 1–69).

In the first subsection dealing with proper names (Eigennamen, 3–27) the author presents the proper names language by language and — if it is possible — mentions their meaning and origin. In some cases Werner merely refers to their antecedents among common nouns. The richest material, obviously, comes from the Ket language again. Ket, Jug etc. female and male first names as well as the surnames are presented in separate subsections. The ethnonyms are collected in the next chapter (Ethnonyme, 28–33), and finally, the author presents the geographical names (Geographische Namen, 34–69). Werner mentions his sources in all cases (these are primarily Dulzon's *Ketskie toponimy Zapadnoj Sibiri* (1959) and Maloletko's *Drevnie narody Sibiri* (2000)).

The onomastic chapter is followed by a sketchy but rich grammatical summary (Gramatische Erläuterungen, 71–148). This chapter is of great importance as many data given in the entries would be impossible to identify without it since, as has been mentioned above, the system of inflection of these languages is quite complex. A separate subsection deals with declension (Deklinationstypen in den Jenissej-Sprachen, 73–78.). This part — as the author himself points out — can be found in his previous works (the three works mentioned above, published in 1997). There are 11 cases in Ket, while in Jug and in Kott 10 cases are differentiated, and the system of inflexion is further complicated by the fact that in the Yenisei languages three genders (male, female, neutral) are also distinguished. The second subsection deals with conjugation (Konjugationstypen in den Jenissej-Sprachen, 79–148.). The material of this section was partly taken from *Die ketische Sprache*, too.

Among Hungarian linguists, it is primarily Uralists who can make use of the dictionary under review, as it pertains first of all to areal research. It is regrettable — although, taking the size of the three volumes into consideration, it is acceptable to some extent, too — that there is no Index of Uralic and other non-Yenisei languages, so it takes considerable effort to find the Uralic, Altaic or Russian data in the dictionary. In order to help the reader to find Uralic data, the authors of the present review list the page numbers of entries dealing with Uralic languages. Following the English names of the languages, the abbreviations used by Werner, as well as the corresponding German names are given:

Enets

- en(z). = enzisch: I: 34, 219, 338, 383
 samJen. = jennisej-samojedisch: I: 106, 145, 219, 291, 311, 382, 398
 II: 62, 149, 178, 182, 221, 282, 284, 294

Finnish

- fin(n). = finnisch: I: 30, 321, 336, 344
 II: 285

Chanti

- chan(t). = chanti (ostjakisch): I: 106, 142, 299
 II: 74, 79
 ugr.-ostj. = ugrisch-ostjakisch (chanti): I: 21

Kamass

- samK: I: 145, 338, 449
 II: 94, 100, 101, 149, 212, 251, 268, 274, 283, 438

Komi

- zrj: II: 26, 42, 48, 219, 358, 392

Hungarian

- ung. = ungarisch: I: 81, 258
 II: 100, 172

Mansi

- man(s). = mansi (wogulisch): I: 300
 II: 69
 wog. = wogulisch (mansi): I: 72, 164, 258
 II: 2, 7, 26, 42, 85, 111, 183, 191, 276, 392

Mordvin

mordw. = mordwinisch: I: 302

Nganasan

ngan. = nganasanisch: I: 111, 154

samT: I: 106, 123, 291, 311, 338, 342, 382, 398

II: 6, 62, 100, 141, 207, 274, 284

Nenets

nen(z). = nenzisch: I: 93, 150

II: 15, 17, 26, 164, 180

samJur = samojedisch-jurakisch: I: 33, 109, 123, 145, 225, 311, 338, 382

II: 3, 6, 16, 19, 26, 65, 94, 111, 123, 162, 164,
182, 201, 221, 268, 274, 280, 282, 283, 284,
299, 315

Proto-North-Samoyedic

nsam. = nordsamoyedisch: I: 93, 111, 302

II: 20

Proto-Finno-Ugric

finn.-ugr.: II: 149

Proto-Samoyed

sam.: I: 34, 154

II: 20

Proto-Uralic

ural.: I: 300

II: 26, 128, 153, 219

Selkup

slk. = selkupisch: I: 33, 106, 111, 142, 163, 278, 299, 304, 312, 348, 349, 363,
415, 438, 448, 451, 454, 470, 471, 474, 481, 482

II: 6, 8, 13, 14, 16, 26, 39, 56, 78, 96, 106, 119, 158, 164,
172, 176, 271, 273, 274, 285, 308, 334, 392, 416

samOst(j): I: 16, 31, 51, 109, 141, 145, 256, 275, 336, 342, 421, 427, 449, 475,
476, 482

II: 4, 7, 9, 10, 26, 65, 78, 82, 83, 94, 98, 100, 101, 119, 131, 148, 164,
175, 191, 212, 215, 216, 218, 220, 245, 249, 251, 267, 268, 269,
281, 283, 294, 295, 312, 377, 402, 416, 438

Udmurt

udm. II: 26

wotj. = wotjakisch: II: 42, 219, 285, 358

Apparently, Werner's use of abbreviations is neither systematic nor consistent. In the case of certain languages—e.g., 'samK'—the abbreviations are really perplexing, especially taking into consideration that you can find 'kam.', as well. Unfortunately, neither will the list of abbreviations let the reader know whether Kamass (kam) belongs to Turkic languages or not. Having surveyed through the dictionary, the reader can draw the correct conclusion that 'samK' must stand for Kamass belonging to the

Samoyedic language family. A consistent editor should definitely have eliminated these inaccuracies and shortcomings.

Further comments on the Uralic data:

1. The author — as can be suspected from the foregoing — uses Uralic external and internal denominations inconsistently. This can lead even a Uralist astray (especially when several abbreviations occur within an entry, referring to different denominations of one and the same language). The author seems to have accepted the abbreviations and expressions of his sources. As a matter of fact, Werner's Uralic data come from earlier Ket–Uralic comparative works, essentially Helimski's *Keto-uralica* (1982) and Bouda's *Die Sprache der Jenissejer* (1957). He should have called the readers' attention to his using the abbreviations in this way.
2. It is conspicuous that in the dictionary we cannot find any Mator data. We may suppose, on the one hand, that at the time when Eugen Helimski's work *Die matorische Sprache* (Studia Uralo-Altaica 41, Szeged, 1997) was published work had already been in progress on this dictionary; on the other hand, the distribution of this book containing rich Mator material (and of the whole series) — as well as that of publications of universities or research institutes in general — is yet to be worked out, not only abroad, but also within Hungary.

The Uralic data of the dictionary have to be evaluated by Uralists. This short review cannot undertake that task.

On the whole, Heinrich Werner's dictionary — like his previous works — is of assistance to researchers not only of the Yenisei languages: on the one hand, it summarises and systematises the results and material of former research; on the other hand, it widens our present knowledge by the latest, newest results and data. Whereas his previous works were mainly concerned with grammar, the current dictionary can be a very important and useful aid to the lexicology, onomastics and etymological research of the Siberian area.

Sándor Szeverényi — Beáta Wagner-Nagy

HUNGARIAN BOOKS ON LINGUISTICS

Ferenc Kiefer – Péter Siptár (eds): *A magyar nyelv kézikönyve [Handbook of the Hungarian language]*. Akadémiai Kiadó, Budapest, 2003. 611 pp.

At the end of the twentieth century, representatives of a number of scientific disciplines, among them linguists, felt that the time had come for grand syntheses. Around the millennium, and ever since, an increasing number of handbooks have been published. The authors of the present *Handbook of the Hungarian Language* do not think that their discipline is now ready for an all-embracing synthesis but the sheer amount of knowledge that has been amassed during the past few decades definitely warrants the publication of a summary of the most important results. The authors of this volume have undertaken that task.

The *Handbook* starts with six chapters on the history of Hungarian, including the origins of its word stock. The next three chapters discuss the system of Hungarian grammar. Two chapters cover the geographical, and another five the social varieties of this language. Further topics include text linguistics and stylistics, issues of linguistic norm and language cultivation, psycholinguistics and language acquisition, neurolinguistics and phonetics, as well as linguistic rights and linguistic technologies.

Contents: Hungarian as a Finno-Ugric language (Katalin Sipőcz), The Ancient Hungarian period (László Horváth), The Old Hungarian period (Zsuzsanna Papp), The Middle Hungarian period (Lea Haader), The Language Reform (Adrienne Dömötör), Word stock (Károly Gerstner), Phonology (Péter Siptár), Morphology (Ferenc Kiefer), Syntax (Katalin É. Kiss), Text (Gábor Tolcsvai Nagy), Style (Gábor Tolcsvai Nagy), Dialects and regional varieties (Jenő Kiss), Varieties of Hungarian spoken in other countries (Miklós Kontra), On the variability of language use within Hungary (Miklós Kontra), The Hungarian Sociolinguistic Interview (Tamás Váradi), Bilinguality and multilinguality (Anna Borbély), Language planning, language policy, language cultivation (Klára Sándor), Linguistic norm (Gábor Tolcsvai Nagy), Psycholinguistics (Csaba Pléh), Child language (Csaba Pléh), Neurolinguistics (Zoltán Bánréti), Phonetics (Ilona Kassai), Language and the law (Miklós Kontra), Language technologies (Gábor Prószték – Gábor Olaszy – Tamás Váradi).

Ferenc Kiefer (ed.): *Igék, főnevek, melléknevek. Előtanulmányok a mentális szótár szerkezetéről [Verbs, nouns, and adjectives. Preliminary studies on the structure of the mental lexicon]*. Tinta Könyvkiadó, Budapest, 2003. 140 pp.

This volume contains five preliminary studies on various aspects of the Hungarian lexicon, written as part of a project leading to the forthcoming fourth volume of the series *Strukturális magyar nyelvtan* [A structural grammar of Hungarian]. Two papers discuss the event structure of verbs, two deal with the problem of polysemy, and one is about the semantics of adjectives.

Beáta Gyuris's paper explores the exact conditions on the use of time adverbials in *-ra/-re* (sublative) as in *A diákok három napra elfoglalták az egyetemet* 'The students captured the university for three days'. It turns out that the reversibility of the event

is a necessary but non-sufficient condition, cf. **Jancsi öt órára elvesztette a kulcsot* 'Johnny lost the key for five hours'. Károly Varasdi's paper concentrates on the event structure of two classes of verbs. Those modified by *végig* 'to the end' (as in *Jancsi végigmulatta az előadást* 'Johnny was having fun throughout the lecture') do not admit any kind of time adverbial (**Jancsi két óra alatt / két órán át végigmulatta az előadást* 'Johnny was having fun in two hours / for two hours throughout the lecture') since the time span of the event they denote is determined by the event time of the object complement (*az előadást*). With verbs of the type *elfelejt* 'forget' as in *Pisti elfelejtett ötökör telefonálni* 'Steve forgot to make a phone call at five', the time adverbial refers to the embedded event rather than to the event of forgetting.

Polysemy is characteristic of practically all lexical items. Gergely Pethő's paper systematises phenomena observed with respect to the polysemy of nouns. The author presents the major problems with traditional definitions of polysemy, and then discusses the types of systematic polysemy in nouns (such as 'nation' — 'a member of that nation' — 'the language spoken by that nation' as in *A török bevette Budát* 'The Turks occupied Buda' — *A konferenciára sok német is eljött* 'Many Germans attended the conference' — *Az angolt sokan beszélik* 'English is spoken by many people'). The last part of the paper deals with non-systematic polysemy such as 'body part' — 'part of an object' as in *a hegy lába* 'foot of the hill', *a szatyor füle* 'handle ["ear"] of a bag', *a hajó orra* 'bow ["nose"] of a ship'. Mária Ladányi's case study discusses the polysemy of verbs denoting sound emission (and movement involving sound emission) as in *A mozdony bezakatol az állomásra* 'The engine clatters into the station' or *A szél besüvít a kunyhóba* 'The wind whistles into the hut'.

Finally, Ferenc Kiefer's paper systematises our present knowledge of the semantics of adjectives. The author proposes a more detailed classification of adjectives than used heretofore and also novel criteria for telling those classes apart. He discusses the semantics of irregular adjectives in detail.

Contents: The meaning of verbs and event structure (Beáta Gyuris), How much information do adjectives need in the lexicon? (Ferenc Kiefer), Hungarian verbs of sound emission: lexical meaning and syntactic structure (Mária Ladányi), The polysemy of nouns (Gergely Pethő), Two semantically peculiar classes of verbs (Károly Varasdi).

Enikő Németh T. – Károly Bibok (eds): *Általános Nyelvészeti Tanulmányok XX. Tanulmányok a pragmatika köréből* [Papers in General Linguistics Vol. 20: Papers on pragmatics]. Akadémiai Kiadó, Budapest, 2003. 327 pp.

This collection of papers, as is now traditional in the volumes of *Általános Nyelvészeti Tanulmányok*, has two aims. First, it makes as many theories of, and interdisciplinary approaches to, linguistic pragmatics available for the Hungarian reader as possible, at least in their main outlines. Secondly, it applies those theories and approaches to copious bodies of Hungarian material collected in various ways, thus making a contribution both to further progress in the field and to our understanding of Hungarian-specific pragmatic phenomena, eventually leading to a general pragmatic description of Hungarian language use.

Contents: The pragmatics of manipulation and persuasion in Hungarian advertisements (Anett Árvay), A lexical pragmatic approach to word meaning (Károly Bibok), The interpretation of words and situation-bound utterances in terms of a dynamic

model of meaning (István Kecskés), Morphopragmatic phenomena in Hungarian (Ferenc Kiefer), System of preferences in verbal conflicts (Ágnes Lerch), Pragmatic abilities in Williams' syndrome (Ágnes Lukács and Csaba Pléh), The role of hyperbole in interpersonal rhetoric (Attila László Nemesi), Principles of communicative language use (Enikő Németh T.), Speech acts of repair work in Hungarian (Małgorzata Suszczyńska), Topic activation and topic continuity in Hungarian texts (Gábor Tolcsvai Nagy).

Jenő Kiss – Ferenc Pusztai (eds): *Magyar nyelvtörténet* [The history of Hungarian]. Osiris Kiadó, Budapest, 2003. 950 pp.

It is after 36 years' time that a new university textbook on the history of Hungarian now replaces its predecessor (Loránd Benkő (ed.): *A magyar nyelv története* [The history of the Hungarian language]). It has by now become vitally important to summarise the results of research in Hungarian historical linguistics that have accumulated over the years and also to represent, in a textbook format, the increasing impact of descriptive linguistics, sociolinguistics, and pragmatics on that branch of study.

In the first part of the book, Jenő Kiss surveys general issues with respect to linguistic change and historical linguistics, with an argumentative description of its categories and basic principles. The second, more voluminous part discusses the systemic history of Hungarian, in the linear order of its stages or historical periods. Modifying the traditional periodisation, the book divides Modern Hungarian (starting in 1772) into two periods, 'New Hungarian' and 'Newest Hungarian', the latter starting with 1920, the year of the Trianon Peace Treaty. In that general framework, the chapters on the history of orthography were written by Klára Korompay, those on historical phonology by Erzsébet E. Abaffy, and those on historical morphology by Zsófia Sárosi. The history of the word stock is discussed by Éva Zsilinszky, that of the parts of speech by Mária D. Mátai, that of phrases by László Horváth, and that of sentences by Magdolna Gallasy (simple sentences) and Lea Haader (compound and complex sentences). The chapters on historical textology were written by Magdolna Gallasy, whereas that on the history of word meanings (not divided into historical periods) was written by Ferenc Pusztai.

This book is more than a normal-size textbook but its structure and wording is definitely based on didactic considerations. Its larger scope does not only encourage teachers to use it selectively, with emphases added, but it clearly requires them to do so. The tasks that are appended to each part or chapter are not simply 'comprehension questions' or mere exercises but projects that require the teacher's assistance or cooperation. They include simpler and less time-consuming ones as well as ones that suggest topics for master's theses or even full-fledged book-size studies. These tasks are supported (and the textbook is completed) by ample bibliographical references that are included throughout and lead on to issues that are not treated in detail or studies whose general point of view differs from that of the present authors.

The book gives a systemic history of Hungarian as can be inferred from the earliest documents and, from Middle Hungarian onwards, it is a history of mainly written Hungarian. It will be complemented soon by a volume entitled *Magyar nyelvtörténeti kalauz* [A guide to the history of Hungarian] based on the historical corpus of Hungarian, especially on early written documents of that language.

András Cser: The typology and modelling of obstruent lenition and fortition processes. Akadémiai Kiadó, Budapest, 2003. 141 pp.

The author of this volume attempts to establish a link between the notions of lenition and fortition on the one hand, and the implicational hierarchy of obstruents on the other, through the property of sonority. Earlier theories of lenition and fortition are critically assessed and the typological patterning of obstruent systems is given thorough treatment. Crucial links between these two types of phonological phenomena are demonstrated, empirically verified and phonologically explained. The hypothesis proposed is tested against a corpus of diachronic phonological changes from a large number of languages and is further demonstrated through the detailed historical discussion of the obstruent systems of the Germanic languages. In the last chapter the author proposes a model for the representation of manner and place of phonological segments which explains the idiosyncratic behaviour of palatal obstruents and correctly predicts a range of phenomena that originally fall outside the intended scope of the investigation.

Contents: Preliminary; 1. Treatments of lenition and fortition in historical linguistics; 2. Sonority; 3. The typology of consonant systems; 4. Sonority changes in the non-Germanic languages; 5. A survey of the history of the Germanic obstruent system(s); 6. Phonological interpretation; 7. General summary; Appendices.

INFORMATION FOR CONTRIBUTORS

Please provide typewritten double-spaced manuscripts with wide margins (50 characters per line, 25 lines per page). Type on one side of the paper only and number all the pages consecutively. The following information should be provided on the first page: the title of the article (or, in case of reviews, the title of the book under discussion, the name of the publisher, the place and date of publication as well as the number of pages), the author's full name and address and an abbreviated title of the paper (not exceeding 45 characters including spaces). Only original papers will be published and a copy of the Publishing Agreement will be sent to the authors of papers accepted for publication. Manuscripts will be processed only after receiving the signed copy of the agreement. Authors are requested to send two hard copies of their manuscript + a floppy disk under DOS.

The manuscript should be accompanied by an abstract of about 100 words. It should be typed on a separate sheet of paper. Tables, diagrams and illustrations (with the author's name and an Arabic number) should be presented on separate sheets. Captions should be typed on a separate sheet and placed at the end of the manuscript. Footnotes should be typed double-spaced on a separate sheet at the end of the article. All language examples (and only these) are to be italicized (single underlining). Citations in the text should be enclosed in double quotation marks (" " in case of a paper written in English, „ " in German and « » in French).

Reference to a publication should be made by the name of the author, the year of publication and, when necessary, by page numbers in the following ways:

- ... as described by Schmidt (1967) ...
- ... as referred to by Hoover (1967, 56-78; 1976, 43).
- ... mentioned by several authors (Elgar 1978, 77; Williams 1981, 154-6) ...

An alphabetically arranged list of references should be presented at the end of the article as follows:

- Bárczi, Géza 1958a. Magyar hangtörténet [The historical phonology of Hungarian]. Akadémiai Kiadó, Budapest.
- Bárczi, Géza 1958b. A szótövek [Word stems]. Akadémiai Kiadó, Budapest.
- Brockhaus, Wiebke 1995. Skeletal and suprasegmental structure within Government Phonology. In: Jacques Durand - Francis Katamba (eds): *Frontiers in phonology: Atoms, structures, derivations*. 180-221. Longman, Harlow.
- Cole, Jennifer 1995. The cycle in phonology. In: Goldsmith (1995): 206-44.
- Goldsmith, John A. (ed.) 1995. *The handbook of phonological theory*. Blackwell, Cambridge MA and Oxford.
- Kaye, Jonathan - Jean Lowenstamm - Jean-Roger Vergnaud 1990. Constituent structure and government in phonology. In: *Phonology 7*: 301-30.
- Tomioka, Satoshi 1997. *Focusing effects and NP-interpretation in VP-ellipsis*. Doctoral dissertation, University of Massachusetts, Amherst.

For marking subsections decimal notation should be applied. Do not use more than four digits if possible.

Examples within the text should be marked in *italics*. Meanings are to be rendered between inverted commas (' '). If glosses are given morpheme by morpheme, the initial letter of the gloss should be placed exactly below that of the example. Grammatical morphemes can be abbreviated in small case letters connected to the stem or the other morphemes by a hyphen. No period should be applied in such abbreviation. For example:

- (1) (a) A sólymaid elszálltak
 the falcon-gen-pl-2sg away-flew-3pl
 'Your falcons have flown away.'

Examples can be referred to in the text as (1a), (1a-d), etc.

One proof will be sent to the author. Please read it carefully and return it by air mail to the editor within one week.

ISSN 1216-8076

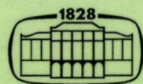


9 771216 807004

Acta Linguistica Hungarica

AN INTERNATIONAL JOURNAL OF LINGUISTICS

Volume 51 Numbers 3–4
2004



Akadémiai Kiadó
Budapest

Member of
Wolters Kluwer Group

Acta Linguist. Hung. ALHUE8 HU ISSN 1216-8076

ACTA LINGUISTICA HUNGARICA

AN INTERNATIONAL JOURNAL OF LINGUISTICS

Acta Linguistica Hungarica publishes papers on general linguistics with particular emphasis on discussions of theoretical issues concerning Hungarian and other Finno-Ugric languages. Papers presenting empirical material must have strong theoretical implications. The scope of the journal is not restricted to the traditional research areas of linguistics (phonology, syntax and semantics, both synchronic and diachronic), it also covers other areas such as socio- and psycholinguistics, neurolinguistics, discourse analysis, the philosophy of language, language typology, and formal semantics.

Book and dissertation reviews are also published. The articles should be written in English, exceptionally, however, papers written in German and French are also accepted.

The journal is published in yearly volumes of four issues by

AKADÉMIAI KIADÓ

Prielle K. u. 19/D, H-1117 Budapest, Hungary

<<http://www.akkrt.hu/journals/aling>>

Manuscripts and editorial correspondence should be addressed to

ACTA LINGUISTICA HUNGARICA

Institute for Linguistics

P.O. Box 701/518, H-1399 Budapest, Hungary

Phone: (36 1) 351 0413

Fax: (36 1) 322 9297

E-mail: kiefer@nytud.hu

siptar@nytud.hu

Orders should be addressed to

AKADÉMIAI KIADÓ

P.O. Box 245, H-1519 Budapest, Hungary

Fax: (36 1) 464 8221

E-mail: journals@akkrt.hu

Subscription price for Volume 51 (2004) in 4 issues: EUR 228 + VAT incl. online and normal postage; airmail delivery EUR 20.

© Akadémiai Kiadó, Budapest 2004

Acta Linguistica Hungarica is abstracted/indexed in Bibliographie Linguistique/Linguistic Bibliography, International Bibliographies IBZ and IBR, Linguistics Abstracts, Linguistics and Language Behaviour Abstracts, MLA International Bibliography

ACTA LINGUISTICA HUNGARICA

AN INTERNATIONAL JOURNAL OF LINGUISTICS

EDITOR-IN-CHIEF:

FERENC KIEFER

HUNGARIAN ACADEMY OF SCIENCES, BUDAPEST

ASSOCIATE EDITOR:

PÉTER SIPTÁR

EÖTVÖS LORÁND UNIVERSITY, BUDAPEST

REVIEW EDITOR:

BEÁTA GYURIS

HUNGARIAN ACADEMY OF SCIENCES, BUDAPEST

EDITORIAL BOARD:

HUBERT HAIDER

UNIVERSITÄT SALZBURG

MARTIN HASPELMATH

MAX-PLANCK-INSTITUT, LEIPZIG

HARRY VAN DER HULST

UNIVERSITY OF CONNECTICUT

ISTVÁN KENESEI

HUNGARIAN ACADEMY OF SCIENCES

ANDRÁS KERTÉSZ

UNIVERSITY OF DEBRECEN

KATALIN É. KISS

HUNGARIAN ACADEMY OF SCIENCES

EDITH MORAVCSIK

UNIVERSITY OF WISCONSIN, MILWAUKEE

CSABA PLÉH

BUDAPEST UNIVERSITY OF TECHNOLOGY

AKADÉMIAI KIADÓ
BUDAPEST

ACTA LINGUISTICA HUNGARICA

VOLUME 51, NUMBERS 3–4, 2004

CONTENTS

GUEST EDITORS' NOTE.....	227
<i>Árvay, Anett</i> : Pragmatic aspects of persuasion and manipulation in written advertisements.....	231
<i>Bibok, Károly</i> : Word meaning and lexical pragmatics.....	265
<i>Kecskes, Istvan</i> : The role of salience in processing pragmatic units.....	309
<i>Kiefer, Ferenc</i> : Morphopragmatic phenomena in Hungarian.....	325
<i>Nemesi, Attila László</i> : What discourse goals can be accomplished by the use of hyperbole?.....	351
<i>Németh T., Enikő</i> : The principles of communicative language use.....	379
BOOK REVIEW.....	419
HUNGARIAN BOOKS ON LINGUISTICS.....	437

GUEST EDITORS' NOTE

In the pragmatics literature there is no consensus concerning the subject of the field. One can find various treatments of pragmatics that differ from each other, e.g., in respect of how pragmatics is related to grammar and semantics, or to code use, communication and cognition; whether the phenomena studied by pragmatics belong to competence or performance; whether the pragmatic abilities of the human mind may be considered a module, and if so, how this module could be characterized. (For an overview of pragmatics conceptions, traditions and methods, see Jef Verschueren, *The pragmatic perspective*. In: Jef Verschueren–Jan-Ola Östman–Jan Blommaert (eds): *Handbook of pragmatics: Manual*. 1995, 1–19. Benjamins, Amsterdam.)

In the papers presented here about pragmatics and in a further, second instalment of this thematic issue, which will be published in the next volume of *Acta Linguistica Hungarica*, one can also see the different strands. Hence, there is only a general “common denominator” valid for all contributions: Pragmatics deals with **the use of language in various contexts to achieve various purposes**, primarily from a linguistic point of view.

The diversity of the present papers and pragmatics itself is increased by the fact that phenomena of language use are the subject of several other disciplines: social psychology, sociolinguistics, rhetoric, stylistics, etc. Indeed, these fields amplify our knowledge about issues of language use. In addition, pragmatics, in accordance with its theory-dependent scope of interest, strives to advance aided by these disciplines and integrate their achievements. From among the disciplines studying language use, discourse analysis merits a separate mention. Very often, it is demarcated from pragmatics only because of its own name, which, however, can refer to a wide range of topics such as analysis of oral discourses and written texts as well as conversation analysis, discourse and text grammar.

The first aim of this special issue, i.e., the present and forthcoming collections of papers, is to show **the diversity** (in the above-mentioned senses) **characteristic of present-day Hungarian pragmatics research**. The second aim of the two instalments is to provide up-to-date investigations which apply **the theoretical and interdisciplinary approaches to several kinds of pragmatic phenomena in Hungarian**. The editors think that each

paper contributes this way to the further development of theoretical issues and/or description of pragmatics of Hungarian language use.

Turning to a brief overview of the papers included in this first instalment of the thematic issue of *Acta Linguistica Hungarica*, we have to begin with a remark concerning the arrangement of the papers. The diversity of perspectives and aspects appearing in contributions has made it impossible to place them in some thematic order. Therefore, the articles are arranged alphabetically by their authors' names. The topics of the papers will also be introduced below in this order but we will attempt to indicate some interconnections between them.

In her paper entitled *Pragmatic aspects of persuasion and manipulation in written advertisements*, Anett Árvay attempts, first, to separate persuasion from manipulation in an interdisciplinary—pragmatic and social psychological—framework and identifies four possible types of manipulation. Then, in the second part of the paper she investigates how persuasion and manipulation work in written advertisements in Hungarian. And finally, a Hungarian and an American direct mail message are analysed to see whether the revealed Hungarian strategies exist in English or not, i.e., whether they are language-specific or not.

Károly Bibok's paper *Word meaning and lexical pragmatics* outlines a conception of lexical pragmatics which critically amalgamates the views of Two-level Conceptual Semantics, Generative Lexicon Theory and Relevance Theory and has more explanatory power than each theory does separately. Such a lexical pragmatic conception accepts lexical-semantic representations which can be radically underspecified and allow for other methods of meaning description than componential analysis. As words have underspecified meaning representations, they reach their full meanings in corresponding contexts (immediate or extended) through considerable pragmatic inference. The Cognitive Principle of Relevance regulates the way in which the utterance meaning is construed.

István Kecskés's contribution *The role of salience in processing pragmatic units* explains the relevance of Giora's Graded Salience Hypothesis to pragmatics research, arguing that although this hypothesis is a psycholinguistic theory, it may contribute significantly to our understanding of pragmatic processing. It is claimed that the salient meaning of lexical units constituting utterances in conversation plays a more important role in comprehension than has been believed by supporters of the direct access view, the classic modular view, Two-level Conceptual Semantics and Relevance Theory.

In his paper *Morphopragmatic phenomena in Hungarian* Ferenc Kiefer discusses pragmatic aspects of patterns created by morphological rules.

The first phenomenon considered concerns the use of the excessive which does not add semantic information to the superlative and carries purely pragmatic information only. The second problem investigated has to do with the pragmatics of the diminutive suffix. The semantic meaning of the diminutive suffix is 'small' or 'a little', which is often overridden by the pragmatic meaning. The third phenomenon is the possibility suffix *-hat/-het*. From among its various pragmatic meanings deontic speech acts are well-known from other languages. There are, however, several other uses of this suffix which seem to be typical of Hungarian.

Attila László Nemesi in his article *What discourse goals can be accomplished by the use of hyperbole?* looks at the role of hyperbole in interpersonal rhetoric, using conversations from classic Hungarian films as data. Analyses demonstrate that hyperbolic utterances convey the speakers' attitudes, either real or only presented, towards the topic of conversation. According to the social psychological laws of public behaviour, the expression of emotional relation or attitude is mostly subordinated to the speaker's attempt to construct an intended impression on conversational partners.

The contribution *The principles of communicative language use* by Enikő Németh T. overviews some typical principles of communicative language use in a cognitive pragmatic approach applying a reductionist method. It re-evaluates the principles and provides a new classification of them relying on the definition of ostensive-inferential communication. The principles which can be divided into rationality and interpersonal-ity principles are really principles of effective information transmission on objects and selves. They refer to two kinds of language use: informative and communicative ones. Finally, the paper reduces all rationality and interpersonal-ity principles to a very general rationality principle, i.e., the cognitive principle of relevance.

* * *

The guest editors would like to express their gratitude, first of all, for the opportunity given to them by the editor-in-chief of *Acta Linguistica Hungarica*, and for the assistance of the associate editor. All the papers were refereed by at least two reviewers, to whom we wish to express our special thanks at this place. Finally, we are grateful to the contributors for their commitment and patience during the refereeing and editing process.

Enikő Németh T., Károly Bibok

Akadémiai Kiadó, Budapest

PRAGMATIC ASPECTS OF PERSUASION AND MANIPULATION IN WRITTEN ADVERTISEMENTS*

ANETT ÁRVAY

One way of exerting influence is realized by the use of language. According to the communicative intention of the influencer, thoroughly designed strategic discourse can be either persuasive or manipulative. First, the present research separates persuasion from manipulation in an interdisciplinary—pragmatic and social psychological—framework. Four possible types of manipulation are identified in the paper: (i) withholding certain propositions, (ii) informing without ostensive communicative intention to the intended addressee, (iii) using linguistically and logically correct elements that force an unconditional and unquestioning agreement and (iv) using fallacious argumentation. The second part of the paper investigates how persuasion and manipulation work in written advertisements in Hungarian, what kind of strategies and linguistic tools are used to influence readers. A Hungarian and an American direct mail message are analyzed to see whether the Hungarian strategies identified exist in English or they are language-specific. It is argued that they work in English as well.

1. Introduction

One way of exerting influence on other people is realized by the use of language. The aim is to change attitudes, opinions of readers and listeners or strengthen their already existing opinions and attitudes. According to the communicative intention of the influencer, the thoroughly designed strategic discourse can be either persuasive or manipulative. The present research attempts 1. to separate persuasion from manipulation on the theoretical level in an interdisciplinary framework; 2. to take a closer look at what kind of strategies and linguistic tools are used in Hungarian written advertisements to influence readers; and 3. to see whether the Hungarian strategies identified exist in English or whether they are language-specific.

According to the above-mentioned aims, the paper is organized as follows. Section 2. defines the key terms; separates persuasion from manipulation in the light of significant pragmatic theories; reviews the results of relevant social psychological experiments; and finally outlines

* I would like to thank Enikő Németh T., Károly Bibok and the two anonymous reviewers for their insightful comments on an earlier draft of this article.

four types of manipulative strategies. In section 3. manipulative and persuasive strategies are analysed in Hungarian and English written advertisements. Section 4. makes some concluding remarks.

2. Separating persuasion from manipulation

2.1. Definitions of persuasion and manipulation

Persuasion is a widely known and used phenomenon in human communication. Even in ancient times a separate field of study, rhetoric was devoted to its theory and practice. The major aim of ancient rhetorical schools (e.g., Protagoras, Gorgias, Aristotle, Cicero, Isocrates, Quintilian) was to train students to present a speech in public in order to convince their audience on various public issues, and trials. Besides discussing and memorizing persuasive tools, the sophists did not deter from applying and teaching false argumentation (logical fallacies), since the success of the speaker in winning the audience was the chief goal (Szálkáné Gyapai 1999).

Like persuasion, manipulation belongs to the category of social influencing. Both are goal-oriented, the aim of the communicator is to form or change (or sometimes maintain) a certain opinion or attitude in a given subject, according to the communicator's interest. In the case of advertisement, the prime aim is to help the audience form a positive attitude toward a product or service in order to become potential customers.

According to Webster's dictionary (1998), to persuade is to "move by argument, entreaty, or expostulation to a belief, position or course of action." Argument targets the rational part of the receiver, whereas the other two do not. Similarly to the dictionary definitions, Aristotle claimed that besides logical arguments (logos), persuasion is often based on a reputation for credibility (ethos) and emotional appeals (pathos) (Szálkáné Gyapai 1999). Contemporary psychological and social psychological research justified the importance of the role of emotions in persuasion (Brembeck-Howell 1952; Janis-Hovland 1959; Littlejohn 1983; Walton 1989; 1992).

To manipulate means (Webster's dictionary 1998) "to control or play upon by artful, unfair or insidious means especially to one's own advantage." Manipulation is artful, hence the victims do not even recognize/realize that they are being manipulated because the manipulative dis-

course does not use a direct conviction but rather camouflages its real intention.

Parret (1994, 230–1) regards manipulation as a unilateral, semi-failed, truncated action, where the manipulator's intention is supported by his/her cognitive and pragmatic competence, and leading to his/her intervention, implying a performance on the part of the manipulated party. The manipulated party's potential response positions are limited to impotence, obedience or indifference. The cardinal feature of manipulation is that it puts the initial contract between the participants at risk and elicits the return to an uncontrollable polemic.

Harré (1985, 127) has a similarly moral standpoint. He states that the moral quality of persuasion lies in the fact that the communicator respects his/her audience by treating them as people. Whereas in the case of manipulation the listeners do not participate as conscious and active beings in the flow of communication, the speaker treats them as things.

Breton (2000, 25) notes that manipulation is an aggressive and forcible action: it deprives the manipulees from their freedom. He goes on to argue that the majority of the advertisements today contains manipulative utterances and the reason why informative, argumentative ads are in the minority is that they cannot change the attitudes of the potential customers.

All the above definitions and conceptualizations regard manipulation as a negative, non-cooperative and unequal phenomenon; however, it must be noted that there are a few situations where manipulation serves right purposes. Psychotherapy, for instance, uses manipulation in the exact interest of the patient. Although, on the theoretical level, the separation of persuasion and manipulation seems quite clear, according to some scholars (Siklaci 1994; Bańcerowski 1997b; Breton 2000) to separate them in practice is a very difficult task. No wonder that hardly any concrete analyses can be read on the topic.

In the following two sections the relevant pragmatic theories will be discussed along with some social psychological experiments to illustrate the process and the effect of persuasion and manipulation.

2.2. Pragmatic approaches

Manipulative communication will be discussed first within the framework of Sperber and Wilson's (1995) influential and well-known theory that is

offered as a cognitive model of human communication. The model of ostensive-inferential communication is comprehensive and dynamic because both parties participating in the flow of communication are considered of equal importance, and therefore it provides a possibility to trace where and how manipulation can occur.

Sperber and Wilson combined the former code-models and inferential models, and thus solved the problem of inaccurate description of verbal communication by complementing the decoding process, which is indispensable to the interpretation of an utterance, with an inferential process (Németh T. 1996, 12).

The definition of ostensive-inferential communication states that “the communicator produces a stimulus which makes it mutually manifest to the communicator and audience that the communicator intends, by means of this stimulus, to make manifest or more manifest to the audience a set of assumptions $\{I\}$ ” (Sperber–Wilson 1995, 63). According to the definition, when communication is successful, the informative and the communicative intentions are always present. The former refers to the act of making manifest or more manifest a set of assumptions $\{I\}$ to the audience, the latter means that the communicator has an informative intention and makes it mutually manifest to audience and communicator (Sperber–Wilson 1995, 58–61).

Let us now examine how and to what extent the model describes the mechanism of manipulation. Two verbal manipulative situations will be discussed in the light of the ostensive-inferential communication model. Imagine that a family is playing the strategic and military game Risk, where the purpose is to either occupy territories or to exterminate all the soldiers of one player. Mark wants to make use of Jamie to exterminate Helen’s troops that are stationed at Kamchatka. Therefore he utters the following to Jamie:

- (1) I think the best move for you would be to attack Kamchatka, so you could reach America quickly.

Jamie understood Mark’s informative intention (he was informed with $\{I\}$: you get to America through Kamtchatka fast, so it is worth attacking), and his communicative intention: that this utterance was said to him. However, he did not understand Mark’s motivations that he did not recommend the utterance to make him more successful, but rather to cause him to exterminate Helen’s troops. According to Sperber and Wilson’s model, this situation should be described as successful, how-

ever obvious it is that the communicative partner did not understand everything, or possess all the relevant information. This situation can be regarded as manipulation, since some information remained hidden and the real intention of the communicator (to use Jamie to attack Helen's troops) was camouflaged. Jamie, the addressee, was able to decode the linguistic stimulus, but he was unable to recognize the real intention of the speaker, therefore he came to the wrong implication. He regarded the utterance as honest; moreover, Jamie did not even understand that the attack would be primarily advantageous for Mark. The question now lies in the following: where is the hidden information (the attack of Helen's troops is best for Mark) and the manipulative intention (do the dirty job instead of me without knowing what you are doing) situated? In Sperber–Wilson's model this hidden information can only be in $\{I\}$. However, the answer is not satisfying. In the example quoted, two different actions took place on two different layers. On the first, surface layer there was a successful communication, the communicator uttered $\{I\}$ (you can quickly reach America through Kamchatka, therefore it is worth attacking), and this informative intention became obvious. On the second, hidden layer, neither informative nor communicative intention was attached to $\{I_2\}$ (the attack will be best for Mark; do the job instead of me). Mark did not make it mutually manifest that he intended to convey a particular piece of information, therefore Mark manipulated his partner.

Now, let us consider another situation. At a party Susan learns that Tom is hesitating whether to travel to Bangkok or to Rio de Janeiro. Susan worries for Tom but she does not dare to admit it to him face to face. Therefore she wants to influence Tom by addressing a question to Kate while knowing that Tom is nearby and could hear what she is asking. Susan asks Kate:

(2) Have you heard about the terrible epidemic in Bangkok?

In this situation the informative intention was fulfilled: Susan wanted to inform Tom about the epidemic, whereas she did not have a communicative intention towards Tom, i.e., she did not want Tom to know that the utterance was addressed to him as well. However, there is another layer of the content of informative intention because Susan also had a persuasive intention towards Tom, at the same time she did not want to communicate it to him. Therefore, according to Sperber and Wilson's model situation (2) cannot be regarded as communication in a twofold sense: Susan intended to inform Tom about the epidemic in Bangkok and about

her persuasive intention but she had a communication intention neither with respect to the information about the epidemic, nor in connection with the information about her persuasive intention. By informing Tom but not communicating with him, Susan manipulated Tom.¹

The two situations that were analyzed above can both fall into the category of manipulation irrespective of the language in which information conveyed in (1) and (2) was expressed, since manipulation was realized in the malfunctioning of the communicative situations and not by semantic elements or syntactic structures.

Harder and Kock's (1976) theory of presupposition failure accords with the ostensive-inferential communication model described above. Harder and Kock explain manipulation with the lack of mutual knowledge (of either facts or feelings or intentions), which in their article means that the communicator does not place all the information at the communicative partner's disposal, something is hidden from the partner that would be indispensable for him/her to understand the utterance. In the case of honest communication, the communicator knows that his/her partner knows that he/she is being influenced, so they share mutual knowledge. When manipulation occurs, communication is asymmetric; the communicator wants the partner not to know that he/she is being manipulated. If the communicator does not believe what he/she states (e.g., Susan knows that there is no epidemic in Bangkok), the situation is labelled by Harder and Kock as treacherous manipulation.

Besides the ostensive-inferential model of Sperber and Wilson, manipulation is examined within another prevalent pragmatic theory, the Gricean Cooperative Principle and the conversational maxims of Quantity, Quality, Relation and Manner (Grice 1975). Since the definitions of manipulation all agree that it is a deceptive, unequal and non-cooperative way of communicating, it seems reasonable to apply a normative frame like the Gricean model. Relevance theorists criticize the Gricean model for its one-sided, hearer-oriented nature, in fact Taillard (2000, 153) in her article asserts that the theory of communication that is based on the necessity of cooperation is bound to fail. Nonetheless, she admits that in some non-cooperative forms of communication such as marketing communication it does offer help for analysis. In this paper the maxims will be considered as reference points. Grice himself emphasizes the impor-

¹ It can also happen that Susan wants to influence and manipulate Tom by addressing a question to Kate without an intention to inform Tom about her persuasive intention.

tance of the first maxim of the category Quality, which states: Do not say what you believe to be false. He also claims that the rest of the maxims function only if this first one is observed.

During the complex analysis of manipulative and persuasive discourse, the speaker-centered speech act theory (Austin 1962; Searle 1969; 1976) is applied to characterize the writer's persuasive or manipulative strategies. In the present study the speech acts of the ads are analysed according to Searle's (1976) categorization of illocutionary acts: 1. assertives (the speaker reports the existence of a fact); 2. directives (the speaker's intention is to make the hearer do something); 3. commissives (the speaker commits himself/herself to doing something); 4. expressives (referring to the psychic state of the propositional content); or 5. declaratives (warranting propositional content). This classification is important in actual analysis, but offers no help in separating persuasion from manipulation. As far as the universality of performatives is concerned, cross-cultural differences may exist, hence several performatives are related to culture-specific rituals (Thomas 1995, 43).

2.3. Social psychological approach

The study of social influence is the central topic of social psychology (Allport 1968; Aronson 1972). The first experiments in the 1940s aimed at determining the key factors of persuasive communication (Hovland et al. 1953), but unfortunately very few were identified. New influencee-oriented theories and research that focussed on the success of persuasion proved to be more fruitful. One of these theories is Petty and Cacioppo's (1981) cognitive-response paradigm, according to which every persuasion carried out by communication is self-persuasion, which is formed by the background knowledge of the hearer. When the stored knowledge and opinion is similar to that of the discourse, the hearer is easily willing to accept the communicated message. This idea was further refined by Petty and Cacioppo in their elaboration likelihood model (1986). They differentiated between the central and peripheral route of changing opinions and attitudes. The persuasiveness of the same discourse is judged differently by various receivers according to their interests, involvement, motivation and momentary state. Attitude change follows the central route when the hearer is involved and motivated, evaluates the discourse, and considers the seriousness, quality, importance and relevance of the arguments, whereas the peripheral route is at work when the receiver does

not make too much effort in comprehension and his/her evaluation of the discourse is based on incidental aspects, such as surface and non-content features (e.g., the number of arguments, the speaker's characteristics, and the reliability of the source). It must be noted that in many situations both routes are present at the same time but not to an equal extent.

If we accept that the "victim" of manipulation is not aware of being manipulated, and hence cannot do anything against it, then the explanation of how manipulation occurs should be looked for in research that examines the effect of stimulus under the threshold level. Key (1972) was the first who revealed that ads can work on two levels: beneath the surface of the conscious persuasive message, there can be another message exerting influence.

During discourse comprehension certain linguistic tools can function subconsciously. These are called metasemantic features by Semin and De Poot (1997). In their empirical study they investigated how the choice of verb in question formulation influenced respondents' answers. The result showed the manipulative effect of question formulation: the type of the verb (static vs. dynamic) influenced significantly the answers of the respondents.

In her experiment, Loftus (1979) proved the manipulative effect of the definite article. A question was posed to participants in two forms: whether they could see broken headlights, or whether they could see the broken headlights. Those whom the definite article version was asked answered twice more often that they had seen broken headlights, even if there were no broken headlights at all.

The effect of thematic roles has also been proven in a study by Trew (1979). In his study he compared two articles reporting on the same event (the clash between Caribic youngsters and the police) but reporting differently. In one of these articles the Caribic youngsters were significantly more often in the agent role, whereas the policemen in patient role, which suggests that different ideological standpoints resulted in different thematic roles. This can obviously manipulate the readership who do not even have a reason for suspicion, since they read a linguistically correct text.

Howard-Kerin (1994) investigated the persuasive effect of the order of rhetorical questions and arguments. In their empirical study they found that if rhetorical questions are placed after arguments, the persuasive power of the discourse increases.

The studies mentioned above were all carried out in English, and they all proved that a linguistic stimulus can have subconscious effect, and thus can accomplish manipulation.

The previous two sections (2.2., 2.3.) discussed manipulation from the point of view of pragmatics and social psychology. These two fields were integrated by Taillard (2000) into a unified model of persuasive communication that was based on relevance theory (Sperber–Wilson 1995) (thus non-normative in nature) and claimed to be able to systematically explain how persuasive stimuli are understood and how persuasive intention is fulfilled. Besides relevance theory, the model incorporates the elaboration likelihood model (Petty–Cacioppo 1986), the heuristic systematic model (Chaiken et al. 1989), attribution theory (Kelley 1967; Eagly–Chaiken 1993) and the persuasion knowledge model (Friestad–Wright 1994). One of the core elements of the model is persuasion knowledge, which enables the target (i.e., receiver) to identify the persuasion attempt and the agent's (i.e., the communicator's) goal (Taillard 2000, 162). Despite the fact that the model does not mention manipulation proper, some of the comprehension routes outlined describe manipulation.

2.4. Four types of manipulative strategies

From the communicator's point of view manipulation can be defined as follows: a manipulative intention is present and always leads to a manipulative strategy. The aim of the communicator is to make the receiver(s) accept a fact or opinion, i.e., according to 2.2., $\{I\}$. $\{I\}$ can be true or false; however, the strategy applied in order to force acceptance does not fulfil the criteria of cooperative communication.

Manipulation can be regarded as successful if the receiver believes, accepts, and considers the utterance as true and valid and in the meantime does not recognize that he/she was manipulated. Based on the aforementioned criteria, manipulation can be realized by the following strategies: (i) withholding certain proposition(s); (ii) informing without ostensive communicative intention to the intended addressee; (iii) using linguistically and logically correct elements that force an unconditional and unquestioning agreement; and (iv) using fallacious argumentation.

The strategies listed are not mutually exclusive; in a given discourse all four can be applied and can strengthen the manipulative effect. Let us see in detail how these manipulative strategies work:

(i) Proposition(s) withheld. The communicator withholds some of the information and the manipulative intention (see (1)), withholding itself realizes manipulation.

(ii) Lack of communicative intention. The communicator utters $\{I\}$ to his/her partner; however, at the same time there is another addressee of the information who does not know that $\{I\}$ was intended for him/her to recognize the informative intention (see (2)).

(iii) Linguistically correct elements forcing agreement. Certain linguistic elements inherently carry the possibility of manipulation. The processing of these elements goes on during decoding, which is an automatic process, therefore these elements have a subconscious effect, independent of the context. This is the reason why even native speakers fail to notice them. These elements are manipulative because they force agreement on the receivers without the receivers knowing about it. In section 2.3., which discussed the social psychological approach, empirical studies were cited that proved that the thematic roles, the type of the verbs in question formulation, the order of rhetorical questions and arguments, and nouns with the definite article also influence the readers subconsciously and therefore have a manipulative effect. The latter tool belongs to the phenomenon of semantic presuppositions, which can be manipulative if they involve false presuppositions (Kiefer 1983, 52), and thus force the acceptance of a false statement. Semantic presuppositions can be accomplished not only by nouns with the definite article (as mentioned above), but also by, e.g., factive verbs (e.g., *know*, *regret*, *forgive*) whose dependent clause is judged as true, because inner negations and yes/no questions leave presuppositions untouched. This is illustrated by the following Hungarian (3a) and English (3b) advertisements.

- (3) (a) Ő [az anyukád] tudja, hogy az Ariel a legmakacsabb ételfoltokat is kiszedi a ruhácskádól.

'She (your mother) knows that Ariel takes out even the most persistent food stains from your clothes.'

- (b) Did you know that cardiovascular disease is the #1 killer in America?

Adjectives in the comparative in contrastive structures also induce presuppositions (with the intensifying word *még* 'even'). So, ad (4) presupposes that your hair was originally shining and healthy.

- (4) Haja még ragyogóbb és egészségesebb, mint valaha.

'Your hair is even more shiny and more healthy than ever.'

With regard to the question of the universality of presuppositions, Kiefer (1983, 78–82) notes that non-universal, idiosyncratic presuppositions certainly exist, since languages differ in their lexica and syntactic structures, but the phenomenon (that if a given presuppositional unit or structure is present in a language then it necessarily causes a specific presupposition) itself is universal.

When such tools are used by the communicator unconsciously (i.e., the manipulative intention is missing), they cannot be regarded as manipulative strategies, only manipulative tools. The more empirical research proves the potential manipulateness of certain linguistic elements, the more precisely it will be possible to construct and uncover manipulative discourse.

(iv) Fallacious argumentation. It can function as a manipulative strategy provided the communicator uses it in a persuasive discourse. Argumentation is fallacious if the discourse contains one or more false propositions or if the way of argumentation is incorrect. The former type coincides with the Augustinian concept of lie (cf. Kecskés 1998, 406). In this paper a lie that is communicated with a persuasive intention will be regarded as manipulation. Certainly, sometimes it is hard to prove if a proposition is true or false. When the way of argumentation is incorrect, reasoning contains a logical (either formal or informal) mistake whose types were catalogued and named first by Aristotle and then were further enlarged and refined by scholars during the centuries. Using argumentation fallacies is effective among receivers who follow the peripheral route of attitude change; for those who follow the central route, the cognitive effort is greater during discourse processing, which enables them to recognize the fallacies and uncover manipulative intention. If that happens, the linguistic element loses its manipulative effect and the strategy is unsuccessful. Argumentation fallacies characterize the logical structure of a discourse, therefore they must exist in the Hungarian and English languages, where Western ways of logic are accepted and constitute the basic norm.

The various elements of style can also be effective among receivers following the peripheral route. According to Bańcerowski (1997a, 192), evaluations that are coded in words, obscurity (homonyms, polysemes) and very often tropes are not simply persuasive, but rather manipulative tools. Sometimes these tools do not observe the first two maxims of Manner (avoid obscurity of expression; avoid ambiguity), however, it is not obvious when. In the case of style, the Gricean maxims do not help to

judge whether a stylistic element is persuasive or manipulative. Consequently, stylistic devices cannot be considered as a separate manipulative strategy, rather tools that can become manipulative when applied in fallacious argumentation.

2.5. Focus on the receiver: detecting manipulative communication

The previous section discussed the accomplishment of the communicator's strategies. Let us now summarize from the receiver's point of view, how the four manipulative strategies outlined are understood within Tailard's integrated model of persuasive communication (2000, 166) and how the strategies observe the Gricean maxims.

(i) On the surface layer an ostensive communication takes place, the informative intention is recognized along with the persuasive intention of the communicator. The communicative partner's persuasive knowledge allocates cognitive resources and the processing goes either in a systematic (comprehensive, analytic, cf. central) or a heuristic (cf. peripheral) way. On the hidden layer, since the communicator withholds certain information, neither informative nor communicative intention is attached to $\{I_2\}$. In a Gricean sense this strategy violates the first maxim of Quantity (make your contribution as informative as it is required (for the current purpose of the exchange)).

(ii) The communication is covert, no communicative intention is attached to $\{I\}$. However, it depends on the communicative situation whether the second addressee (the overhearer) has the chance to recognize the persuasive intention. If there is neither informative nor communicative intention attached to the persuasive intention, then inferential processing takes place and no relevance can be guaranteed. If he/she recognizes the persuasive intention (as he/she was informed with it), persuasive knowledge allocates cognitive resources and the processing goes either in the systematic or the heuristic way. Even if processing is systematic, optimal relevance cannot be assumed, and therefore the result is either some or no persuasion or unintended effects. If heuristic processing occurs, the result is either some or no persuasion. This type of manipulative strategy does not violate any Gricean maxims, since the communicator and the overhearer are not communicating, therefore no cooperation can be expected.

(iii) This type of manipulative strategy involves two different recovery processes but neither of them can be precisely described by Taillard's model. When linguistically correct elements that can force agreement occur in non-persuasive context (e.g., deceptively asking *Have you seen the broken headlights?* from an eyewitness when there were no headlights at all), the communication seems ostensive, standard ostensive-inferential processing takes place: the eyewitness recognizes the informative intention but does not recognize the manipulative intention and will interpret the sentence as if there had been headlights. When linguistically correct elements that can force agreement occur in a persuasive context (e.g., (3a) where a factive verb was used with false presupposition in advertising discourse), the communication seems ostensive, and the process is the same as on the surface layer in (i): the informative intention and the persuasive intention are recognized, the communicative partner's persuasive knowledge allocates cognitive resources and the processing goes on either systematically or heuristically. However, the possibility of the manipulative intention being fulfilled is to a much greater extent due to the effect of the presupposition. In a Gricean sense this type of strategy violates the maxim(s) of Quality (do not say what you believe to be false; do not say that for which you lack adequate evidence).

(iv) When the argumentation contains a false proposition (see e.g., (5) and (6a–b) below) or when argumentation fallacies occur (cf. (7)–(12) below), the informative intention and the persuasive intention are recognized by the receiver and the persuasion knowledge allocates cognitive resources. In the case of argumentation fallacies manipulation is successful only if heuristic processing takes place, because systematic processing can uncover the incorrect way of argumentation. In terms of the Gricean theory, when the argumentation is fallacious, the communication is not cooperative, and the maxim(s) of Quality is (are) not observed.

3. Influencing strategies in advertisements

3.1. Corpus

Both the Hungarian and the American English corpora compiled for the present study consist of longer (minimum of 50 words) written advertisements that are not simply unscattered slogans, but rather are coherent discourses. Here, advertisement is understood in a wide sense where a

firm wants to sell its image, its product or service. The analyzed texts vary in their types and topics and they come from three sources: 1. leaflets on display in pharmacies, department stores, 2. advertisements that appeared in newspapers, magazines, and 3. direct mail.

3.2. The communicator's strategies and their linguistic tools

Written persuasion lacks the dynamism and the flexibility of oral communication, therefore different strategies are required in order to be effective. Written discourse, especially intended for larger audiences, is not a spontaneous way of language use; on the contrary, it is constructed carefully to fulfil the communicator's goals. Consciously designed and constructed discourse is called strategic discourse (Habermas 1984, 285–6).

The construction of advertisements is usually a longer process, the copywriters design several versions of the text that are corrected and tested before it appears in public. When the product is finally there with the readers, its writers are not present to adjust the discourse to the actual communicative situation and modify the ad according to the readership. However, for readers, the reception is not limited in time, the possibility of re-reading and re-interpreting is always there.

In the present analysis I will start with the assumption that every advertisement wants to influence the targets and make them believe the advertisement. Persuasion strategies are always applied and this fact is shared by the communicator and the readers, it is part of their mutual knowledge. In some cases, however, manipulative strategies are also presented along with persuasive strategies to make a greater impact on the readers.

The fact that there are immeasurable numbers of handbooks and guides available in bookstores and on the Internet proves that these strategies exist and thousands of people use them. The first and second type of manipulation (see 2.4.) cannot be examined in written ads. In the first case, withholding could be traced only from interviewing the copywriters or the manufacturers of the product. Let us suppose there is an advertisement for an expensive diet pill that promises weight loss in two weeks. The manufacturer may withhold the fact $\{I_2\}$ that the pill is not that efficient without making physical exercises every day. This genuinely useful information would be essential for the readers to know in order not to be misled. Certainly, this kind of manipulation will never be admitted by the manufacturer. The second type of manipulation could

possibly be revealed from oral discourse and from a particular situation in a well-designed social psychological experiment. Strategies listed under (iii) can be quantitatively measured and compared, but their efficiency can be checked only empirically like in the experiments of Loftus (1979), and Semin and De Poot (1997) (see 2.3.). In the present study the fourth type of manipulation (fallacious argumentation) will be discussed in detail.

3.2.1. The truthfulness of the discourse

When the discourse contains a false proposition as in (5) and (6a–b) below, one or both maxims of Quality are violated (cf. 2.5.).

- (5) Az Ariel Automat a legjobb a feltöltávolításban.
'Ariel Automat is the best in removing stains.'

Stating that one's product is the best is very common in marketing discourse. However, this advertisement was scientifically proved to be false by chemists, and the manufacturer was fined for three million forints for misleading the consumers. Certainly, testing the truthfulness of ads is still very rare in the market.

The following two ads are based on false promise that is labelled by the rhetorics as raising unfounded hope (Szálkáné Gyapay 1999, 131) and by Breton (2000, 112) as misrepresentation. (6a) tells the readers that regaining youth is possible and vitality can easily be achieved by taking a certain kind of food-supplement, whereas (6b) promises a general solution to problems in life with the help of six spiritual tapes. These ads strongly simplify reality and promise success without real efforts.

- (6) (a) A tudomány felfedezte azt az anyagot, amely energiát termel a testben. Sőt előállítás is sikerült, és amennyiben étrend-kiegészítő formájában veszi be, ezzel visszaállíthatja fiatalságát és életerejét.
'Scientists discovered and even successfully produced the material that makes energy in human body. If you take it as a food-supplement, you can get back your youth and vitality.'
- (b) Get the latest audio program from Dr. Wayne W. Dyer and see how you can find a spiritual solution to all your problems by bringing love, joy and understanding into your life.

3.2.2. Argumentation fallacies

Advertisements can be interpreted as argumentative discourses² as well. The communicator wants to prove that the product (shampoo, diaper, vitamin etc.) is the best, most effective and that the reader undoubtedly needs it. Argumentation is one of the most important persuasive strategies, however, argumentation fallacies can function as manipulative strategies. The theoretical background of the analysis of argumentation fallacies in the present study is based on the pragma-dialectic list of fallacies which were collected by Eemeren–Grootendorst (1992) and also discussed by Walton (1989; 1992). Their approach is normative, they all see fallacies as violations of the rules of critical discussions. The present section analyses some frequently applied argumentation fallacies.

A wide-spread persuasive strategy in advertising discourse is the “problem–solution” pattern, which can be potentially manipulative. The communicator calls the reader’s attention to a specific problem and recommends his product or service as the only perfect solution to it, and this simplification carries the manipulative power. This strategy is very often combined with other persuasive or manipulative strategies.

- (7) (a) A kislfiú mindössze 13 éves volt, amikor váratlanul hullani kezdett a haja. Szülei kétségbeesetten vitték orvostól orvosig, kórházzól kórházra, végigjárták jó néhány természetgyógyász rendelőjét is – mindhiába, a teljesen megkopaszodott fiún senki nem tudott segíteni. Ekkor ismerték meg azt a termékcsaládot, amely Németországban az elmúlt 15 év során több tízezer ember haját adta vissza: a Sidhu-tinktúrát, -sampon és -sprayt.
 ‘The little boy was only 13 when his hair suddenly started to fall out. His parents took him desperately from doctor to doctor, from hospital to hospital, they even visited the surgery of several natural therapeutics, but in vain. This entirely bald boy was hopeless, nobody was able to cure him. And then they found the Sidhu-tincture, shampoo and spray, which led to hair regrowth for thousands of people in Germany in the last 15 years.’
- (b) Landing a dream job will take more than a high-school diploma. The high-tech companies that are fueling the state’s boom need workers with high-level knowledge, skills and work habits. That’s why Front Range Community College is the perfect choice for so many people, whether they want to start working right away or shoot for a job that requires a four-year degree.

² The analysis of argumentation is the subject of argumentation theory, which is a field of pragmatics. Argumentation theory is not a unifying concept; on the contrary, it is contributed to by several conceptually different disciplines such as logic, philosophy, sociology, linguistics, and rhetorics (Eemeren – Grootendorst 1995).

A well-known rhetorical fallacy is the *Post hoc, ergo propter hoc* (false cause-and-effect) between two propositions: the fallacy involves concluding that A causes B because A occurs before B, but there is not sufficient evidence to actually warrant such a claim.

- (8) (a) Az otthoni viseletre tervezett divatos papucsok biztosan támasztják, ugyanakkor gyengéden kényeztetik a lábat, hogy a következő reggelen újra frissen és pihenten induljon neki a napnak.
'These fashionable slippers especially designed for home use support firm and at the same time softly caress your feet to make your morning relaxed and fresh.'

Extract (8a) suggests that if we choose those particular slippers, we will be relaxed the next day, however, our relaxation obviously depends on many factors not only on the type of the slippers we wore the previous day.

- (8) (b) In order to be successful, you have to look successful. That means more than merely shaving every day; it means shaving well—something that some razors simply don't do. The new MACH3 Turbo razor from Gillette, however, is different.

This ad implies that by using the new Turbo razor, we will look and be successful.

Very often *Argumentum ad verecundiam* (argument from respect, appeal to authority) is applied in advertisements. This can be a manipulative strategy if the text refers to unknown anonymous professionals or famous people who are not experts on the topic. When a well-known star tells of his/her pleasant experience about the advertised product (cf. (9a)), it is very often just a simple tie-up, since the star is not an expert of the quality differences, he/she was paid to give his/her face or words to the product. This strategy is based on respect for authority and the effect of role-models. The opinions of popular stars seem convincing and are always watched closely by millions.

- (9) (a) Száraz, vízhiányos bőrömnnek megfelelő kozmetikumokat használtam eddig is, de most már igyekszem egy termékcsaládot használni, mert így az arcápolók egymást kiegészítve fejtik ki hatásukat. [...] Számonra [Hegyi Barbara] az is nagyon fontos, hogy az Avon nem csak termékeivel segít szépnek és egészségesnek maradni, hanem sokat tesz is értünk, nőkért.
'So far I have used cosmetics suitable for my dry skin, but from now I will try to use one product range because they support each other's effect. [...]

For me [Barbara Hegyi]³ it is also very important that Avon helps not only to be beautiful with their products but also does a lot for us women.'

In (9b) the opinion of E. M. Forster, the respected and great writer, is quoted in order to convince the readers that Gibbon's book is worth buying. Since Forster is not a historian, his judgements on history books cannot be considered as a legitimate expert testimony, therefore the argument is fallacious.

- (9) (b) Gibbon is a great navigator of the sea of history — the greatest whom this country, or perhaps any, has produced... Although the *Decline and Fall* came out two hundred years ago, it is still the leading authority on its period.

The following six examples show how appeals to emotion can lead to argumentation fallacies and therefore manipulate the readers. According to Walton (1989, 82), emotional overtones very often dominate advertising. In order to build emotional relationship with the readers, their instincts rather than their calculative reason are targeted. The major problem with fallacious appeals to emotion is that they are powerful distractions and thus can force the readers to accept arguments that are logically weak or irrelevant. In order to decide whether an argument is fallacious or not, careful analysis of the context is required.

The *Argumentum ad populum* fallacy primarily affects emotions and wants to popularize the product by quoting the words of satisfied and smiling people who allegedly have been using the product. The extract in (10a) comes from a Hungarian brochure advertising cards that introduce airplanes. The testimony section starts with the proposition: *Ők már döntöttek...* 'They have already decided...'

- (10) (a) azóta másként nézek az égre; Nyugodtan mondhatom, nem bántuk meg; [Apa és fia] elválaszthatatlanok ezektől a kártyáktól; Nem tudtam ellenállni a nagyszerű ajánlatnak.
'Since then I look at the sky differently; I can surely say: we did not regret it; the father and his son are inseparable from these cards; I couldn't resist the great offer.'

The following two quotations (10b–c) along with several similar testimonies appeared in an English brochure that offers spiritual tapes.

- (10) (b) I began using your program after attending your lecture in Denver. I couldn't believe how easy I started manifesting things into my life.

³ Barbara Hegyi is a popular Hungarian actress.

- (c) If you hadn't fed me with such wonderful spiritual food, I would still be at the bottom of my financial hole.

When reading testimonies like this, some natural scepticism might arise about the alleged effects of the tape, especially in financial matters. However, we should admit that sometimes placebo-effects can occur and realize real improvements in one's life.

In the ads (11a–b) *Argumentum ad misericordiam* (appeal to pity) is discussed that aims at affecting emotions. The goal of (11a) is not to sell a given product, rather to build the image of a company. To strengthen the manipulative effect, the ad contains a false cause-and-effect relationship. The merging of the two companies is depicted as if it were planned for the sake of the patients.

- (11) (a) A mai napon 139.000 ember hal meg betegségben idő előtt. Közülük több mint 25.000 öt év alatti gyerek. Ugyanakkor a mai napon a Glaxo Wellcome és a SmithKline Beecham cég egyesül. Ez azt jelenti, hogy most először több mint 100.000 kollegánk egyesíti a tehetségét világszerte azért, hogy megkeresse a betegségek okait, megtalálja az ellenszerüket, és segítsen a gyógyításukban.
'Today 139.000 people die of illness prematurely. 25.000 of them are children. And today Glaxo Wellcome and SmithKline Beecham are merging. This means that now, for the first time more than 100.000 colleagues are uniting their talent worldwide to identify the causes of many illnesses and find the remedy to help cure patients.'

The following English example depicts the miserable situation of the old very vividly and thus arouses pity.

- (11) (b) Imagine being old and alone in our city. [...] Just imagine living on the fourth floor of a walk-up with dark, narrow stairs. Imagine your fear of falling if you have poor eyesight and osteoporosis. [...] We hope you will sign the enclosed placemat, so that a frail neighbor will know that someone is thinking of them.

This ad illustrates the difficulty of evaluating appeal to pity arguments. Many charitable pleas for aid use overt appeals to pity, however, it is not always an *Argumentum ad misericordiam* fallacy because in some cases pity is reasonable and legitimate (Walton 1989, 103–4). Considering the wider context of (11b) here the direct appeal to emotion of pity seems justifiable, therefore the argument is not fallacious.

(12a–b) demonstrate an interesting combination of *Argumentum ad baculum* (appeal to force, threatening) and *Argumentum ad populum*,

which Walton named as Bacpop argumentation whose aim is to persuade the readers to undertake a particular course of action (1992, 250). The argumentation seems like a warning, although the communicator puts pressure on the readers by mentioning unpleasant consequences and by implying threat of being excluded from a particular group the reader may want to belong to.

- (12) (a) Bad Breath: Why you're always the last to know. A simple question: when someone you know or work with has bad breath, do you tell them? If you are like most people, the answer is probably "No." Which means that nobody is going to tell **you** when **you** have bad breath. So be sure you don't, use ReterDEX products. [...] So don't wait for someone to tell you. Because they won't.

The topic of the ad is so delicate and inconvenient that any potential involvement might frighten the readers, especially because the ad powerfully suggests (by creating a strong division between *you* and *they*) that everybody can have bad breath and thus be condemned and disliked by people, e.g., at workplace. The ad suggests that bad breath is embarrassing and it is desirable to belong to those people who have fresh breath.

- (12) (b) I wonder, though, if you have yet appreciated the extent to which you may be missing out on important background material and information. Just think back to some of the events that have occurred since you received your last copy of *Newsweek*. Are you satisfied with your knowledge of the facts behind these and their full implications?

In this piece of direct mail the communicator uses argument from negative consequences and threatens the ex-subscriber that unless she continues subscribing the magazine, she will be ignorant and will miss the chance to have access to important information. Moreover, the letter wants to suggest that only *Newsweek* can provide reliable information on current issues.

3.2.3. Style

Although style was not considered as a separate manipulative strategy (see 2.4.), it has a crucial role in reinforcing the persuasive effect and the manipulative effect (in fallacious argumentation) of advertisements. Ads belong to strategic discourse, therefore linguistic choices are made consciously. The communicator chooses from the lexicon, the syntactic rules, and decides if he/she wants to deviate from the accepted norm.

Style reveals what the communicator thinks about the cognitive capacity of the reader: the discourse can be reader-friendly or complicated, several propositions can be left implicit or implied. The more information is unexpressed, the larger mutual knowledge is presupposed between the communicator and the readers (Sperber–Wilson 1995, 218).

In his detailed study on persuasive discourse, Sandell (1977) showed that compared to non-persuasive discourse, advertisements contain significantly more adjectives and exaggerating expressions (e.g., superlatives and such words as *always*, *never*). Words are usually shorter and ellipses are often used. Sandell studied Swedish language advertisements only, but his observations seem to be true to advertisements written in German, Danish and English (128–135) as well.

The question how a given trope (alliteration, metaphor, repetition etc.) can function as a manipulative or persuasive tool in most cases can be answered only by analysing the whole discourse. If we take the trope, hyperbole (e.g., *breathhtaking collection*, *unbelievable offer*, *fit and energetic like never before*), that is frequently applied in advertising discourse, it seems to violate the first maxim of Quality by stating untrue things. However, the readers can restore the truth-content of a false proposition and in the meantime they will form some hypothesis about the implicit message of the hyperbole (Nemesi 2003, 209). Therefore, tropes can function as a manipulative device only in a wider sense because the communicator may divert the readers' attention from the content and direct it toward the peripheral route of persuasion. Let us examine the hyperbole in the following advertisement.

(13) *A Világ Repülőgépei* sorozat nem hasonlítható össze egyetlen repüléssel foglalkozó könyvvel sem.

'*The World's Airplanes* series is incomparable to any other books on aircrafts.'

This utterance (13) is a typical example of how hyperbole is presented in ads. It suggests that this is the best book on the topic and it is completely different from other books. However, these kinds of statements are so conventionalized that it became a part of the mutual knowledge between the communicators and the readers that the exaggerating expressions of advertisements should not be understood verbatim. Consequently, the hyperbole here (*nem hasonlítható össze* 'incomparable') does not violate the first maxim of Quality (unlike the hyperbole used in (5)) and therefore cannot be evaluated as manipulative.

3.3. Persuasive strategies

So far only manipulative strategies were discussed but in order to carry out an in-depth complete analysis of an advertisement, persuasive strategies have to be spelt out as well. The most important persuasive strategy is non-fallacious argumentation. It can be rational or pragmatic (Habermas 1984). The former lists causes and facts to convince the readers:

- (14) (a) S mivel a Braun Thermo Scan a dobhártya és a környező szövetek infravörös hőmérsékletét méri, különösen pontos eredményt ad, hiszen a dobhártya vérellátása megegyezik a hipotalamuszéval, amely a test agyi hőközpontja. 'Since Braun Thermo Scan measures the infrared temperature of the eardrum and of the neighbouring tissues, it gives a precise result, as the blood supply of the eardrum accords with that of the hypothalamus, which is the thermocenter of the human brain.'
- (b) In a 1999 survey of FRCC students, 96.7 percent rated the quality of instruction as good or very good.

Pragmatic argumentation (see (15a–b)) considers the desires, wishes and values of the readers. Very often the communicator chooses this kind of argumentation since the promise of fulfilling desires can be more effective than listing rational arguments (Kunst Gnamuš 1987).

- (15) (a) Képzeld csak el, mennyi minden megváltozna az életben, ha egy ekkora nyeremény ütné a markát!
'Just imagine how much would change in your life if you won the Jackpot!'
- (b) Think what you could do with \$56,850 or more right now!

When constructing an advertising argumentative discourse, the communicator may choose between one- or two-sided argumentation. In the first case only the positive sides are listed, which certainly suggests a certain bias from the communicator's side. The advantage of two-sided argumentation is that the system of counter-arguments can be explained by the communicator, therefore there is less possibility for the readers to come up with a new counter-argument. However, neither corpus contained two-sided argumentation.

In the structure of argumentation basically two schemes can be outlined (Kummer 1972). In progressive argumentation the communicator first lists facts, then arguments, and then draws a conclusion (that the readers should buy the advertised product). Progressive argumentation can use conjunctions such as: *so, therefore, for this reason, that is why*. In fact, the "problem–solution" pattern is based on progressive argumen-

tation. In (16) reasons are listed for the aging of skin, and then comes the conclusion that by using Imedeen, the aging process can be stopped.

- (16) Az életkor előrehaladtával bőrünk megújulóképessége folyamatosan csökken, vízhiányossá válik, a kollagén és elasztinszálak veszítenek rugalmasságukból. Az erős napsütés, a téli fűtés és a légkondicionáló okozta száraz levegő, a szmog, a dohányzás is felgyorsítják az öregedési folyamatokat. [...] Az Imedeen hatásosságát sem napok, hanem hetek, hónapok alatt lehet tapasztalni, ám a szépség tartósan meg is marad.

'The revitalising ability of our skin is gradually decreasing with age, and the skin becomes dry, the collagen and elasthan fibres are losing their flexibility. The strong sunrays, the dry air caused by heating and air-conditioning, smog and smoking also accelerates aging. [...] The efficiency of the Imedeen capsule cannot be experienced in a few days but in weeks or months. But beauty is long-lasting.'

In the case of regressive argumentation (17) the conclusion is mentioned first, then supporting arguments follow.

- (17) Open an Ameritrade cash account by March 15, 2001, with an initial deposit of \$500 or more, and you'll get 2,500 Mileage Plus Bonus Miles from United Airlines.

The two kinds of structures can be combined as in (18).

- (18) Puffad? Görcsöl?

Egy szerrel elmúlik! Meteospasmyl.

Oldja a bélgörcsöket, megszünteti a hasi fájdalmat.

'Do you feel bloated? Have heartburn? Meteospasmyl stops them fast! It relieves heartburn and stops pain in the stomach.'

The first line of the ad describes the problem (the facts about having difficulties with digestion), the second line concludes that Meteospasmyl is the solution to it, finally, the third line lists facts about the mechanisms of how the proposed medicine carries out its effect.

Another persuasive strategy that can be applied in ads is the selection of a role for the communicator, i.e., narrator who can be e.g., an advisor, friend, teacher (Árva 2003). When the communicator chooses a role for himself/herself, it will determine the distance and the power-relations (either equal or subordinate or superordinate) between the narrator and the reader. Roles that are traditionally associated with great respect (e.g., scientist, doctor) have persuasive effect on the readers.

Deciding on the degree of politeness can also function as a persuasive strategy. Readers of the ads usually appreciate politeness which evokes positive attitudes towards the communicator. Therefore, it is more probable that his/her words are believed and accepted. Politeness is reflected

in the selection of linguistic elements such as modality and in speech act types. Let us now examine how role-selection and politeness can be used as a persuasive strategy in the next ad:

- (19) A Mamád ugyanúgy megóv majd mindentől, ami Neked ártalmas lehet. [...] Ruháidat Ariellel mossa majd patyolattisztára, hiszen tudja és érzi, hogy ez jó Neked, addig is, amíg Te ezt nem tudod Neki elmondani.
 'Your mom will protect you from everything that can be harmful to you. [...] She will wash your clothes white as snow with Ariel, because she knows that it is good for you until you can say this to her.'

The communicator does not address the target audience (parents) directly, instead literally talks to babies. Certainly it is only a stylistic device, since the baby cannot comprehend an ad. However, the artificial communicative situation (an adult recommends a product for a baby) makes the patronizing tone possible. The narrator takes the role of a nanny, uses informal verb forms in Hungarian, and as a result creates an unequal power-relation. The narrator avoids making a face-threatening act (Brown–Levinson 1987; Goffman 1955), protects the positive face of the reader, emphasizes his/her interests (this will protect you, this is good for you). In this unusual communicative situation with three participants (communicator, mock-addressee, real addressee), the narrator's role and position creates a friendly, informal situation which might evoke positive feelings in readers towards the advertised product.

With regard to the contrastive side of the analysis, English advertisements can also be characterized on the basis of the criteria listed above; however, a large-scale analysis may reveal which are the preferred tools. Rational versus pragmatic, one- versus two-sided, progressive versus regressive argumentation are all discourse organizational (rhetorical) issues, therefore they are likely to be culture-specific. According to a small-scale study (Árvay 2001), American ads tend to prefer regressive argumentation, whereas Hungarian ads use more progressive argumentation. The position of the communicator and the power-relations between the communicator and the readers determine a certain degree of politeness in a given advertisement, which is again highly culture-specific because different cultural conventions will result in different cooperative norms (Wierzbicka 1991). Preferred persuasive tools, i.e., the ratio of the listed persuasive criteria could well characterize the advertising conventions of a culture. However, it must be noted that advertising is an increasingly international genre which necessarily results in the homogenization of the ads.

3.4. Sample contrastive analysis of a Hungarian and an American direct mail

In the sample analysis below, a Hungarian and an American direct mail will be examined in detail, its persuasive and manipulative strategies will be described according to the criteria listed above. Unlike in the United States, the genre of direct mail is a relatively new way of advertising in Hungary. Advertising agencies that prepare these letters in Hungary rely heavily on foreign direct mails. Additionally, if the recommended product is not Hungarian, the letter is very often the translation (with slight modifications) of a foreign mail.

(20)

Kedves Árvay Anett!

Most már hivatalosan is gratulálhatok ahhoz, hogy az előzetes szelekció során bekerült azon ügyfeleink közé, akik esélyesek a Reader's Digest Kiadó 16. ajándéksorsolásán, a 2004 díj bármelyikére—akár a 12 000 000 Ft-os Fődíjra is.

Amikor néhány nappal ezelőtt ezt megtudtam, azon kezdtem el gondolkodni, hogy mennyi mindent lehet csinálni ilyen nagy értékű díjjal. Biztos, hogy ekkora nyeremény gyökeresen megváltoztatja az ember életét. Most Önnek is lehet rá esélye, hogy kipróbálja. Hamarosan értesítjük, mit kell tennie ahhoz, hogy érvényesítse az ajándéksorsolásra szóló részvételi esélyét.

Ezt a lapot azért küldöm, hogy figyelmeztessem. Cselekedjen azonnal, amikor megkapja a Reader's Digest Kiadó borítékját.

Üdvözléssel:

Kádár Tímea

az ajándéksorsolási osztály vezetője

'Dear Anett Árvay,

Let me officially congratulate you on the result of the previous selection. You have got into the group of our clients who have a good chance to win part of the 2004 prizes and possibly the 12 million Jackpot of the 16th drawing of Reader's Digest Publisher.

When I learned this a few days ago, I started to think how much you can do with such huge winnings. I am sure that a prize like that changes one's life dramatically. Now, you have the chance to win. We will let you know shortly what you need to do to enforce your chance of participating in the Grand Drawing.

I am sending this card in order to warn you. Act immediately when you get the envelope of Reader's Digest Publisher.

Yours sincerely,

Tímea Kádár

head of the drawing department'

(21) YOU ARE PRE-APPROVED FOR UP TO \$56,850 OR MORE...

Dear Stephen:

Think what you could do with \$56,850 or more right now! You could pay off high-interest debts and even have some cash left over. Because you're a homeowner, Guaranty National Bank can help you keep more of your hard-earned paycheck in your pocket and get the cash you need!

NO EQUITY? NO PROBLEM! A Guaranty National Bank Debt Consolidation Loan is a smart plan to help you regain control of your finances. Consolidate your debts into a lower, easy-to-manage monthly payment and have cash left over to use however you wish.

That's your savings of \$621 in your first month! Tax deductibility may increase savings (Consult your tax advisor).

NO EQUITY REQUIRED! Even if you do not have any equity in your home, call Guaranty National Bank at 1-800-350-5211 today. We can usually give you an answer in 15 minutes or less. Take advantage of your pre-approved status to consolidate your high-interest debts and the cash you need today.

CALL Guaranty National Bank AT 1-800-350-5211 TODAY!

P.S. Your Pre-Approved Voucher expires January 11, 2003, so act now!

The types of both ads are direct mail, which effect informality; however, every addressee is sent the same text except the salutation. Readers might consider this act as surprising or even appealing, and might wonder how the sender knows their name and address. The seemingly personalized letter may arouse interest and encourage the recipients to read it.

In the first utterance of the Hungarian ad (after the salutation) a manipulative strategy can be noted aiming at the peripheral route: raising unfounded hope.⁴ The letter offers congratulations on something that has not even been fulfilled and possibly will not come true, since the chances are so little, like winning the jackpot in the lottery. Another type of manipulative strategy, a presupposition (the inchoative verb *be-került* 'got into') is applied in the first utterance which presupposes that someone was not in before. As the letter mentions previous selection, it can be implied that some people were left out of the circle of potential winners. This sounds suspicious and false. If I was never in contact

⁴ In the present study the linguistic tools of persuasion and manipulation are studied. However, the analysis can be complemented with considering other, non-linguistic factors, such as psychological factors or visuals. In this particular card two elegant glasses filled with champagne and a rose bouquet can be seen along with the inscription: *Congratulations!* Moreover, the card is written in letters imitating handwriting.

with the company, did not send any application or order, how can I get into a second round? Since the postcard is accompanied by a long and detailed direct mail two days later, and that letter wants to convince the reader about subscribing to the magazine, there is no sense in the company limiting the number of potential customers. Isn't that more possible that "the previous selection" only means that the company had access to some addresses and did not have access to others? The second utterance of (20) is not true, since the writer (i.e., the narrator) of a mass-produced mail will not feel happiness and will not contemplate the potential prize. The discourse violated the first maxim of Quality (do not say what you believe to be false) used fallacious argumentation, thus manipulated the readers.⁵

Similarly, the English ad is manipulative as well, it also employs the strategy of fallacious argumentation. The first utterance (before the salutation) emphasizes a huge sum in big print. There is even a voucher certificate of \$56,850 attached to the letter that is filled in precisely. However, it becomes clear only from the tiny footnote that due to the restrictions, the real chances of obtaining that sum is very little, thus the ad raised unfounded hope. A presuppositional structure also realizes manipulation in the discourse: the application of the inchoative verb *regain* (*regain control of your finances*) presupposes that the reader did not have control over his/her finances.

With regard to the types of argumentation, the Hungarian ad uses pragmatic argumentation (tries to satisfy the dreams of the readers), whereas the English ad mixes pragmatic with rational arguments, it tries to prove the merits of the Debt Consolidation Loan.

The style of the Hungarian discourse is almost official. Comparing the parts of speech did not show any significant results: the ratio of verbs and nouns are balanced, there is no remarkable number of adjectives (cf. Sandell 1977). Abstract and concrete nouns are almost at an equal number. Repetition involves four lexemes: *Reader's Digest Kiadó* 'Reader's Digest Publisher' is used twice, the stem *esély* 'chance', the stem *ajándéksorsolás* 'drawing' and the stem *díj* 'prize' (including the compound noun *Fődíj* 'Jackpot') are mentioned three times. Moreover, the latter stem has a synonym *nyeremény* 'winnings' in the original Hungarian text. In sum, lexical analysis shows a considerable number of

⁵ As one of the referees let me know, this prize nearly-won type of advertisement was forbidden by law in Switzerland some years ago.

lexical repetition which functions as a persuasive tool, as it emphasizes and reinforces the keywords for the readers. As opposed to the Hungarian ad, the style of the English ad is informal, with truncated sentences (e.g., *No equity? No problem!*) and contractions (*you're, that's*) being used. Lexical analysis showed that abstract and concrete nouns are almost in equal numbers here as well. The ad contains a considerable number of lexical repetitions: *debt, cash* and the name of the bank are repeated four times, *pre-approved, more, equity, consolidate/consolidation* and *to-day* three times, *now* and *call* twice.

Politeness in the Hungarian ad can be characterized as the following: the communicator, whose name and title are printed on the card, sets an official yet friendly tone, which somewhat decreases the relatively large distance. In the first part of the discourse the communicator avoids making a face-threatening act, the positive face is protected: she congratulates and expresses her joy (expressive illocutionary act: *gratulálhatok* 'congratulate'), then she makes a promise (commissive illocutionary act: *értésítjük* 'let you know'). The last utterance (before greetings and signature), however, sets a different tone: the communicator strongly threatens the positive face of the reader without redress. The powerful request or rather urging (directive illocutionary act: *cselekedjen azonnal* 'act immediately') is a typical face-threatening act and as such undermines politeness.

The English ad seems to be more direct than the Hungarian one. Calling the addressee by the first name only already suggests a great degree of informality and small distance between the communicator and the reader. However, the lack of a closing section and signature is disturbing. Face-saving and face-threatening acts are equally presented, since the communicator acts as an advisor and offers his help (commissive illocutionary acts: *Guaranty National Bank can help you, we can give you*), but at the same time powerfully requests the readers to act (directive illocutionary acts: *think, consolidate, consult, take advantage, call Guaranty National Bank*). The two imperative verbs *act* and *call* and the word *today* that are mentioned in the last section of the discourse urge the readers to contact the bank. From reading the post script, it becomes obvious that the readers are under emotional pressure, they are almost frightened with missing the deadline and the opportunity the bank offers for them. In spite of this, the argumentation of the last paragraph cannot be judged as fallacious (as an *Ad baculum* fallacy) because the discourse does not mention negative consequences if one decides not to take out the

loan. Moreover, several reasons are listed to prove the merits of the Debt Consolidation Loan which make the urging acceptable. Lexical repetition here functions only as a persuasive and not as a manipulative tool.

To summarize the results of the sample analysis, the communicators in both advertisements used persuasive as well as manipulative strategies.

4. Conclusion

The first aim of the paper was to separate persuasion from manipulation. It was argued that in both cases the goal of the communicator is to have an opinion or fact accepted, however, in the case of manipulation it is camouflaged. Based on the ostensive-inferential model of communication (Sperber–Wilson 1995) two types of manipulation were identified. In the first, the communicator withholds certain information, i.e., besides the communicated $\{I\}$, an unuttered $\{I_2\}$ is also present. In the second type of manipulation no ostensive communicative intention is attached to the informative intention: the communicator can inform someone without his/her knowing that the information was intended for him/her. That means that the communicator forced the overhearer role on an outsider party. In the model of Harder–Kock (1976), manipulation is explained with the lack of mutual knowledge between the communicator and his/her partner, that is, the communicator possesses an information-surplus (cf. $\{I_2\}$). Another key theory in separating manipulation from persuasion was the Cooperative Principle and the maxims of Quality, Quantity and Manner (Grice 1975). Since manipulation is defined by the dictionaries and researchers as a negative form of communication, it is consequently not cooperative and the maxims are not observed, e.g., when certain information is withheld, the first maxim of Quantity is violated. The social psychological approach called attention to a third type of manipulation, where there is no withholding of information, or no ostensive communicative intention to the informed addressee. In the third case native speakers judge the discourse as logically correct and well-formed, but still it can be empirically proved that the discourse has a persuasive effect without the readers or listeners knowing about it. They influence the readers' subconscious, which means that we are not able to reveal how the linguistic stimuli affect us. In the present study, fallacious argumentation that was applied in persuasive discourse was regarded as a fourth type of manipulation.

Based on the outlined types of manipulation, in the second part of the paper manipulative and persuasive strategies were collected from a corpus of Hungarian and American advertisements. Since the major characteristic of the advertisements is proving the prominence and the uniqueness of a product, advertisements were treated here as argumentative discourse. The quality of the arguments and the logical connections between them were analysed with the help of a list of argumentation fallacies (Eemeren–Grootendorst 1992; Walton 1989; 1992) that all violated the maxims of Quality. The study of style brought a less promising result as far as manipulative effect was concerned, since the maxims belonging to the category of Manner are too vague. Therefore it is not clear when they are not observed. The elements of style can become manipulative when applied in fallacious argumentation; in a wider sense, however, when tropes dominate an advertising discourse, they could divert the reader towards the peripheral route of persuasion and thus they could function as a manipulative tool. The quoted examples showed that under the mask of persuasion advertisements can mislead the readers and force them to believe and accept certain propositions by containing manipulative tools.

With regard to contrastive aspects of the paper, the outlined types of manipulation can all be detected both in the English and Hungarian languages. In the first and second types of manipulation, the communicative situation itself and not semantic elements or syntactic structures carry the potential realization of manipulation. In the third type, the manipulative mechanism is the same, although semantic presuppositional units or structures that induce manipulation are not all the same in Hungarian and in English. Argumentation fallacies exist in English as well, since logical mistakes in the course of argumentation are not language-specific.

The persuasive strategies can also be traced in the English advertisements. Nevertheless, only a large scale cross-cultural comparison would be able to show what the preferred strategies of each culture are. The perception and the acceptance of the same strategies could vary among cultures. The sample analysis in 3.4. suggested that for native Hungarian readers the American ad was more face-threatening and direct than the Hungarian but it is not interpreted by native English speakers as rude or pushy. It is important to emphasize once again that more empirical evidence is needed to prove the acceptance of persuasive strategies and the effect of manipulative strategies.

From a practical point of view, the analysis of persuasive and manipulative discourse can be useful for marketing experts, copywriters,

researchers and instructors of reading comprehension, and for a wider audience to develop critical thinking.

References

- Allport, Gordon W. 1968. The historical background of modern social psychology. In: Gardner Lindzey – Elliot Aronson (eds): *The handbook of social psychology*, 1–80. Random House, New York.
- Aronson, Elliot 1972. *The social animal*. W. H. Freeman and Company, New York.
- Árvey, Anett 2001. The analysis of persuasive discourse in English and in Hungarian written advertisements. Ms. Eötvös Loránd University, Budapest.
- Árvey, Anett 2003. A manipuláció és a meggyőzés pragmatikája a magyar reklám-szövegekben [The pragmatics of manipulation and persuasion in Hungarian advertisements]. In: *Általános Nyelvészeti Tanulmányok* 20: 11–35.
- Austin, John L. 1962. *How to do things with words*. Oxford University Press, Oxford.
- Bañcerowski, Janusz 1997a. A nyelv titkai [The secrets of language]. In: *Magyar Nyelvőr* 121: 191–203.
- Bañcerowski, Janusz 1997b. A nyelvi közlés rejtett pragmatikai információiról [About the hidden pragmatic functions of communication]. In: *Magyar Nyelvőr* 121: 49–61.
- Brembeck, Winston L. – William S. Howell 1952. *Politeness: some universals in language usage*. Cambridge University Press, Cambridge.
- Breton, Philippe 2000. A manipulált beszéd [Manipulated talk]. Helikon Kiadó, Budapest.
- Brown, Penelope – Stephen Levinson 1987. *Politeness: some universals in language usage*. Cambridge University Press, Cambridge.
- Chaiken, Shelly – Alexander Liberman – Alice H. Eagly 1989. Heuristic and systematic information processing within and beyond the persuasion context. In: James S. Uleman – John A. Bargh (eds): *Unintended thought*, 212–52. Guilford, New York.
- Eagly, Alice H. – Shelly Chaiken 1993. *The psychology of attitudes*. Harcourt Brace, Orlando FL.
- Eemeren, Frans H. van – Rob Grootendorst 1992. *Argumentation, communication and fallacies*. Lawrence Erlbaum, Hillsdale NJ.
- Eemeren, Frans H. van – Rob Grootendorst 1995. *Argumentation theory*. In: Jef Verschueren – Jan-Ola Östman – Jan Blommaert (eds): *Handbook of pragmatics: manual*, 55–61. Benjamins, Amsterdam.
- Goffman, Erving 1955. On face-work: an analysis of ritual elements in social interaction. In: *Psychiatry* 18: 213–231.
- Grice, H. Paul 1975. *Logic and conversation*. In: Peter Cole – Jerry L. Morgan (eds): *Syntax and semantics*, vol. 3: *Speech acts*, 41–58. Academic Press, New York.
- Habermas, Jürgen 1984. *The theory of action 1*. Beacon Press, Boston MA.

- Harder, Peter – Christian Kock 1976. The theory of presupposition failure. Akademisk Forlag, Copenhagen.
- Harré, Rom 1985. Persuasion and manipulation. In: Teun A. van Dijk (ed.): Discourse and communication, 126–42. Walter de Gruyter, Berlin.
- Hovland, Carl I. – Irving L. Janis – Harold H. Kelley 1953. Communication and persuasion. Yale University Press, New Haven CT.
- Howard, Daniel – Roger A. Kerin 1994. Question effects on generation and the mediation of attitude change. In: Psychological Reports 7: 209–210.
- Janis, Irving L. – Carl I. Hovland 1959. An overview of persuasibility research. In: Irving L. Janis – Carl I. Hovland (eds): Personality and persuasibility, 1–26. Yale University Press, New Haven CT.
- Kecskés, Pál (ed.) 1998. Szent Ágoston breviárium [Breviarium of St. Augustin]. Kairosz Kiadó, Budapest.
- Kelley, Harold H. 1967. Attribution theory in social psychology. In: David Levine (ed.): Nebraska Symposium on Motivation 15, 192–238. University of Nebraska Press, Lincoln NE.
- Key, Wilson Bryan 1972. Subliminal seduction. New American Library, New York.
- Kiefer, Ferenc 1983. Az előfeltevések elmélete [The theory of presuppositions]. Akadémiai Kiadó, Budapest.
- Kummer, Werner 1972. Aspects of theory of argumentation. In: Elisabeth Gülich – Wolfgang Raible (eds): Textsorten, 25–49. Athenum, Frankfurt.
- Kunst Gnamuš, Olga 1987. Argumentation and persuasion. In: Frans H. van Eemeren – Rob Grootendorst – Anthony Blair – Charles A. Willaard (eds): Argumentation: perspectives and approaches 3A, 103–109. Foris, Dordrecht.
- Littlejohn, Stephen 1983. Theories of human communication. Wadsworth, Belmont CA.
- Loftus, Elizabeth 1979. Eyewitness testimony. Harvard University Press, Cambridge MA.
- Nemesi, Attila 2003. A túlzás szerepe a személyközi retorikában [The role of hyperbole in interpersonal rhetorics]. In: Általános Nyelvészeti Tanulmányok 20: 195–219.
- Németh T., Enikő 1996. A szóbeli diskurzusok megnyilatkozáspéldányokra tagolása [Segmentation of spoken discourses into utterance-tokens]. Nyelvtudományi Értekezések 142. Akadémiai Kiadó, Budapest.
- Parret, Herman 1994. Indirection, manipulation and seduction in discourse. In: Herman Parret (ed.): Pretending to communicate, 223–238. de Gruyter, Berlin.
- Petty, Richard E. – John T. Cacioppo 1981. Attitudes and persuasion: classic and contemporary approaches. W. C. Brown, Dubuque IA.
- Petty, Richard E. – John T. Cacioppo 1986. Communication and persuasion: central and peripheral routes to attitude change. Springer-Verlag, New York.
- Sandell, Rolf 1977. Linguistic style and persuasion. Academic Press, London.
- Searle, John R. 1969. Speech acts. Cambridge University Press, Cambridge.
- Searle, John R. 1976. A classification of illocutionary acts. In: Language in Society 5: 1–23.

- Semin, Gün R. – Christianne J. De Poot 1997. The question-answer paradigm: you might regret not noticing how a question is worded. In: *Journal of Personality and Social Psychology* 73: 472–480.
- Síklaki, István 1994. A meggyőzés pszichológiája [The psychology of persuasion]. *Scientia Humana*, Budapest.
- Sperber, Dan – Deidre Wilson 1995. *Relevance: communication and cognition*. Second edition. Blackwell, Cambridge MA & Oxford.
- Szálkáné Gyapai, Judit 1999. *Gyakorlati retorika* [Practical rhetorics]. Nemzeti Tankönyvkiadó, Budapest.
- Taillard, Marie-Odile 2000. Persuasive communication: the case of marketing. In: *UCL Working Papers in Linguistics* 12: 145–74.
- Thomas, Jenny 1995. *Meaning in interaction: an introduction to pragmatics*. Longman, Harlow.
- Trew, Tony 1979. 'What the papers say': linguistic variation and ideological difference. In: Roger Fowler – Robert Hodge – Günter Kress – Tony Trew (eds): *Language and control*, 117–156. Routledge, London.
- Walton, Douglas N. 1989. *Informal logic: a handbook for critical argumentation*. Cambridge University Press, Cambridge.
- Walton, Douglas N. 1992. *The place of emotion in argument*. Pennsylvania State Press, University Park PA.
- Webster 1998. *Merriam and Webster's collegiate dictionary*. 10th edition. Merriam and Webster, New York.
- Wierzbicka, Anna 1991. *Cross-cultural pragmatics: the semantics of human interaction*. Mouton de Gruyter, Berlin.

Address of the author: Anett Árvay
Mohai köz 3.
H-1119 Budapest
Hungary
arvaya@freemail.hu

WORD MEANING AND LEXICAL PRAGMATICS*

KÁROLY BIBOK

In spite of their differences, Two-level Conceptual Semantics, Generative Lexicon Theory and Relevance Theory also have similarities with respect to treatment of the relation of word meanings and contexts. Therefore, the three theories can be considered as complementing each other in analysing word meanings in utterances. In the present paper I will outline a conception of lexical pragmatics which critically amalgamates the views of these theories and has more explanatory power than each theory does separately. Such a lexical pragmatic conception accepts lexical-semantic representations which can be radically underspecified and allow for other methods of meaning description than componential analysis. As words have underspecified meaning representations, they reach their full meanings in corresponding contexts (immediate or extended) through considerable pragmatic inference. The Cognitive Principle of Relevance regulates the way in which the utterance meaning is construed.

1. Introduction

Relations between word meanings and concepts seem to be a timeless problem of lexical semantics. According to holistic cognitive linguistics, word meanings are connected to our world knowledge so tightly that it does not make any sense to talk about linguistic(ally encoded) meaning (cf. Kiefer 1995). At the same time “the concept it [i.e., a word] is used to convey in a given utterance has to be contextually worked out” (Sperber–Wilson 1998, 185). In Relevance Theory initiated by Sperber and Wilson (1995) a hearer interprets an utterance after decoding it by means of inferences in accordance with the principle of communicative relevance. The role of contexts in the construction of full-fledged utterance meanings is also acknowledged by Generative Lexicon Theory (Pustejovsky 1995; 1998) as well as by Two-level Conceptual Semantics (Bierwisch 1979; 1983b; 1996). Although the latter theories take as their starting-point the assumption that in the lexicon words generally encode concepts which are not fully determined, this idea is not unknown for

* The research reported on here was supported by the Széchenyi István Grant. I would like to express my gratitude to the two anonymous reviewers for their suggestions and criticisms, which helped improve the paper.

Relevance Theory. Sperber and Wilson (1998, 185) indicate that words of this type are rather common. Furthermore, in contrast to Generative Lexicon Theory, Two-level Conceptual Semantics distinguishes between linguistic and conceptual meanings. While it considers linguistic meaning to be underspecified, it derives the conceptual meaning from the interaction of linguistic meaning with our world knowledge induced by contexts. However, in spite of these differences, the three theories—because of their similarities with respect to the treatment of the relation of word meanings and contexts—can be considered as complementing each other in analysing word meanings. Moreover, using these three conceptions together seems to be a promising venture since, in the light of the new discipline of lexical pragmatics (Németh T.–Bibok 2001a), research into word meanings should pay special attention to the necessary interaction of lexicon and contexts.

The present paper aims at setting forth in detail such a **lexical pragmatic conception of word meaning** that relies upon as its starting-point the types of representation familiar to Two-level Conceptual Semantics, Generative Lexicon Theory and Relevance Theory (henceforth: TCS, GLT and RT, respectively) and amalgamates the interpretation mechanisms originating from these theories. This is the best way that their advantages can be exploited in the field of mutual effects between lexical meanings and contexts.

Lexical pragmatics, proposed in this study, takes for granted the following five assumptions.

First, it allows for the underspecified representation of lexical meanings.

Second, it conceives of contexts in a broad sense ranging from the purely linguistic contexts (e.g., government structures) to verbal and non-verbal ones containing world knowledge.

Third, unlike in Grice (1975) and in neo-Gricean pragmatics (e.g., Levinson 2000), inferential processes are considered necessary not only to establish (conversational) implicatures via the Co-operative Principle and its maxims. Constructing propositions expressed by utterances also requires the execution of some inferences, because—as post-Gricean RT propagates—the linguistically encoded information is not sufficient for that. Thus, the distinction between semantics and pragmatics is not correlated with the distinction of propositional meaning and implicatures. Rather the research into semantic and pragmatic meanings can be separated alongside with decoding and inference (cf. Carston 2002, 95).

Fourth, lexical pragmatics follows RT in this respect with a difference. Relevance-theoretic pragmatics does not postulate a pragmatic competence, but decoding and inference are two types of cognitive performance, i.e., of real-time, on-line processing (for more on this, see Carston 2002, 10–1). At the same time, interpretation mechanisms of TCS and generative devices of GLT are proposed as rules of theories about linguistic competence. However, I conceive of inferential, interpretative and generative devices in a way neutral in regard to the distinction of competence and performance. To refer to these meaning derivation tools in such a way, I will speak about constructing, or construing, word and utterance meanings which takes place in contexts and has underspecified meaning representations as its starting-point. In doing so, I am encouraged by the parallel architecture of grammar (Jackendoff 2002), according to which grammar contains several sets of formation rules (the “generative” components: phonology, syntax and semantics), each determining its own characteristic type of structure, and the structures are linked by interface components. In comparison with the syntax-centred framework, parallel architecture permits a much closer relation between competence and performance, because it lends itself quite naturally to addressing processing issues (for details see Jackendoff 2002, ch. 7).

Fifth, the expression *constructing, or construing, word and utterance meanings* is intended as a neutral phrase in another respect, namely in that of distinction of interpretation and generation. One of the motivations for creating the parallel architecture of grammar was the specificity of semantic combinatorial rules, which TCS also admitted and even definitely stressed independently of the fact that Bierwisch originally thought of his semantics as an addition to a syntax-centred framework. Furthermore, if one also takes into account that—as has just been seen—parallel architecture makes it possible to connect competence and performance, one should not feel uneasy about real-time processes, whether utterance understanding or utterance production. (RT attempts to capture both sides of communication but it seems to prefer to deal with comprehension processes.)¹

¹ Keeping in mind the clarifications concerning distinctions of competence and performance as well as interpretation and generation, I will not terminologically rephrase the ideas of TCS, GLT and RT into the above mentioned neutral expression. I will only use the new terminology with caution in the present article when this seems to be unavoidable.

The structure of the present paper mirrors the train of thought according to which—in developing lexical pragmatics—one may exploit TCS and GLT (initiated originally not as pragmatic theories by Bierwisch and Pustejovsky), as well as RT playing a significant role in current pragmatics. That is why sections 2–4 investigate these theories one by one, returning again and again to questions of lexical representation and constructing word and utterance meanings in contexts. In progression from section 2 to section 4, I will show how TCS, GLT and RT complement each other and can be assembled together in the framework of lexical pragmatics, which has more explanative power than each theory does by itself. Each section deals with the analyses and methods proposed by the theories only to the necessary degree, and it emphasizes desirable modifications and changes for the sake of more precise and comprehensive solutions.² The paper ends with conclusions (section 5).

2. TCS and lexical pragmatics

During the elaboration of lexical pragmatics one has to take into account from TCS the methods of representation of lexically encoded but underspecified meanings and the operations of contextual interpretation. Word meanings in the lexicon are often not fully specified. The underspecified meaning is concretized by our world knowledge, activated in neutral, i.e., non-metaphorical contexts. Thus, one gets literal meanings of a word from which metaphorical meanings can emerge in non-neutral contexts (Bierwisch 1979, 141–3). Before I turn to the mechanisms of contextual interpretation in TCS, two remarks are in order. First, as has already been indicated in section 1, TCS distinguishes between knowledge of language and world knowledge and, consequently, between two levels of meaning representation: that of linguistic (semantic) meaning and that of conceptual meaning. The context-free, underdetermined meaning (also called core meaning) belongs to the former, the literal and metaphorical meanings (both involving world knowledge, i.e., being context-bound) to the latter. Second, the metaphorical meaning is hardly studied in TCS. Therefore, the conceptual interpretation in TCS actually amounts to the

² As my several earlier papers were written in the framework of TCS, the structure of the section about it is somewhat different from that of sections 3 and 4.

operations that result in literal meanings occurring in neutral contexts, i.e., conceptual shift, differentiation and selection.³

The derivation of a literal meaning of a word can be done by conceptual shift, when the underspecified lexical meaning gets fully determined senses in various conceptual fields, or by conceptual differentiation, when the core meaning is concretized in somewhat different ways but in one and the same conceptual domain. In utterances the selection and combination of literal meanings produced by conceptual shift and differentiation is regulated by the third operation of contextual interpretation mentioned above, namely by conceptual selection. Consider (1).

- (1) (a) 1975-ben Péter elment az iskolából.
 1975.ine⁴ Péter.nom left.indef.3sg the school.ela
 'In 1975 Péter left school.'
- (b) Délelőtt tíz órakor Péter elment az iskolából.
 morning ten o'clock.tem Péter.nom left.indef.3sg the school.ela
 'At ten o'clock in the morning Péter left the school.'

In the context of the time adverbial in (1a), the noun *iskola* 'school' most likely refers to an institution, and in (1b) it can be typically interpreted as a building. These two different meanings of *iskola* 'school' derive from an underspecified meaning given in (2).

- (2) (a) 'x has the goal to provide for teaching/learning processes',
 (b) $\lambda x[x \text{ GOAL } w]$, where $w = \text{TEACHING/LEARNING PROCESSES}$.

(2a) and (2b) are equivalent to each other, but the latter formalizes the underspecified meaning of *iskola* 'school' in the language of lambda-calculus (for details see Bierwisch 1983b; 1996). As a matter of fact, it should be clear that one has to introduce a variable of level into the description of the core meaning of *iskola* 'school' and, accordingly, to specify it to separate the noun *iskola* 'school' from *egyetem* 'university', *főiskola* 'college' etc. However, (2) is sufficient for the present purposes.

³ I will turn to the issue of metaphors in section 4.

⁴ The abbreviations used in the glosses throughout this paper are the following: 3sg = third person singular, abl = ablative, acc = accusative, all = allative, def = definite conjugation, del = delative, ela = elative, ill = illative, ine = inessive, indef = indefinite conjugation, ins = instrumental, nom = nominative, poss = possessive inflexion (of third person singular), sub = sublative, sup = superessive, tem = temporal.

The literal meanings of *iskola* 'school' in (1a) and (1b) can be derived through conceptual shift by means of the concretizing variable *x* as an institution and as a building, respectively.

It is obvious that this way of the treatment of polysemy is distinct from the solution of classical lexicology and lexicography, according to which the secondary meaning is derived from a fully specified primary meaning on the basis of a metonymical relation between them. Before enumerating reasons arguing in favour of the new conception of polysemy, a remark is necessary. The meanings 'institution' and 'building' of various *school*-type nouns⁵ are shown differently in the dictionaries of Hungarian. In Bárczi-Ország (1959–1962) these meanings figure as a separate meaning and its variant in the entry *iskola* 'school', two separate meanings in the entry *egyetem* 'university', they are combined into one meaning in the entry *kórház* 'hospital', and not dissociated at all in the entry *főiskola* 'college'. In Pusztai (2003) one finds a separate meaning and its variant in the entries *iskola* 'school' and *egyetem* 'university' but the 'building' meaning is not indicated in the entries *főiskola* 'college' and *kórház* 'hospital'. Even if we disregard such lexicographic inconsistencies, the explanation of polysemy of *school*-type nouns via conceptual shift is more adequate for the following reasons (cf. Bierwisch 1983b):

- (a) neither the 'institution' meaning nor the 'building' meaning seems to be "more literal" than the other,
- (b) the problem of the selection of a primary meaning, which could often be solved only in an arbitrary way, does not emerge,⁶
- (c) the failure of alternation of 'institution' and 'building' systematically explains the specificity of the nouns *kormány* 'government' and

⁵ These are the nouns which have a similar but not the same set of meanings as the noun *iskola* 'school' does. They are the following:

középiskola 'secondary school', *egyetem* 'university', *főiskola* 'college', *intézet* 'institute', *akadémia* 'academy', *múzeum* 'museum', *színház* 'theatre', *opera* 'opera house', *mozi* 'cinema', *parlament* 'parliament', *kormány* 'government', *palota* 'palace', *minisztérium* 'ministry', *bank* 'bank', *tőzsde* 'stock exchange', *bíróság* 'court of justice', *kórház* 'hospital', *élelmiszer-áruház* 'supermarket' etc.

⁶ Taylor (1994) and Kiefer (2000, 129–38)—the latter in the framework of TCS—take as a starting-point the metonymical relationship between 'institution' and 'building' meanings of such a noun as *iskola* 'school'. I will return to their standpoint after discussing the forms of lexical-semantic representations in GLT (see 3.4).

palota 'palace', i.e., the alternation in question is blocked if either conceptual unit is lexicalized in a lexical entry.

It can be seen from (c) that there is not a sharp distinction between the two types of meaning, i.e., linguistic and conceptual meanings. The reference to institution or building can either depend on the context (cf. *iskola* 'school') or be fixed on the lexical-semantic level (cf. *kormány* 'government' or *palota* 'palace').

However, in my earlier work (Bibok 1999; 2000) I proposed an important modification of Bierwisch's conceptual shift. The literal meanings, directly and indirectly derived from the underspecified meaning, have to be distinguished. The first type of literal meanings is called primary, the second one non-primary. The distinction at stake is unavoidable because—in contrast to Bierwisch's original proposal—not all the literal meanings of nouns *iskola* 'school', *könyv* 'book' etc. can be immediately derived from underspecified cores. To put it the other way around, stating that all the resulting meanings are literal does not mean that they are unstructured. In fact, they might have a complex internal structure. Let us consider the example *iskola* 'school' once more. Its primary literal meanings ('institution' and 'building') can be directly derived from the underspecified meaning. Nonetheless, its non-primary literal meanings cannot derive from such a core, but they appear by way of the derivation from specific primary meanings, similarly to the forming of non-basic meanings in traditional lexicology and lexicography. Surely the non-primary meanings 'type of institution' and 'ensemble of people' (cf. English expressions like *the school as one of the most important inventions of human civilization* and *the school going for a trip*) are attached to conceptual units 'institution' and/or 'building'. Furthermore, the non-primary meaning 'activities' (cf. *the school annoying somebody*) has to be added to the conceptual unit 'ensemble of people'. Despite the structured character of literal meanings, they all remain literal in the sense that they figure in neutral contexts, i.e., in contexts which do not require the deletion or re-interpretation of previously established meaning components, which is necessary in the case of metaphorical meanings.

Like the noun *iskola* 'school', the verb *elmegy* 'leave' in (1) can also be interpreted in two ways: as a change in affiliation in (1a) and as a change of place in (1b). The corresponding literal meanings of this verb are derived from an underspecified meaning by conceptual differentiation. The representation of the latter meaning contains the abstract compo-

nent MOVE, which indicates no change in physical or social space, as well as a condition concerning MOVE (formally speaking: a predicate variable bound by an existential quantifier). This variable is concretized in corresponding contexts as a change of physical or social place.⁷

As for conceptual differentiation in general, it has to be stressed that I also modified Bierwisch's original version of it in my earlier papers (Bibok 1998; 2000; 2002). I used conceptual differentiation in connection with verbs such as *hív* 'call', *küld* 'send', *vág* 'cut' etc. combining it with the notions of lexical stereotype and prototype. The events which can be expressed by single lexemes (and not by some periphrastic causative constructions) are restricted in terms of the lexical stereotypes belonging to conceptual representations of word meanings. Lexical stereotypes prescribe the corresponding—perhaps culture-dependent—manner (if any) and goal (if any) of the events (Gergely-Bever 1986). While lexical stereotypes of lexemes constrain their referential potential, they do not prevent these lexemes from conceptually differentiating in context. The literal meanings taking shape this way can refer not only to typical but also to non-typical situations.⁸ These constituents of event representations can be illustrated with an analysis of the verb *cut*. Its lexical stereotype includes the standard ways in which one can cut something but excludes such non-stereotypical methods as the following. If John fastens a knife to

⁷ Abstract meaning components similar to MOVE are assumed by Jackendoff (1990, 25–7), who applies GO, BE and STAY appearing in semantic representations of *go/change*, *be* and *keep*, respectively, to various semantic fields (space, possession, ascription of properties, scheduling of activities). Despite such a different range of applicability of such abstract meaning components as MOVE or GO, one can reasonably think of one and the same conceptual interpretation domain, namely of change from a state to another state. It is worth noting that HAVE occurring in the representation of *lose* also seems to be a meaning component with a similar broad set of interpretations belonging to one and the same abstract possession. See examples (i)–(v) taken from Bierwisch (1983a, 68):

- (i) John lost his money, as he was not aware of the hole in his pocket.
- (ii) John lost his money by speculating at the stock market.
- (iii) John lost his friend in the overcrowded subway station.
- (iv) John lost his friend in a tragic car accident.
- (v) John lost his friend, as he could never suppress bad jokes about him.

As for MOVE, below (3.3) it will appear in a more generalized form in another respect: it can mean a change of not only physical place but also of physical position (for this, see Wierzbicka 1996, 82–3).

⁸ For prototype semantics dealing with the typicality of category members, see Kiefer (1995).

the surface of a table then puts bread on the edge of the knife and a heavy stone on the bread causing it to be divided into two parts, one can hardly call this event cutting. Instead one would express it with a periphrastic construction: *Doing this and this, John causes that...* So the stereotype of the lexeme *cut* does not allow the non-standard use of a typical cutting instrument. However, it does not exclude the conceptual differentiation of *cut* in contexts. Furthermore, these literal meanings can refer to typical and non-typical cutting events. In the latter case the agent who cuts something may use non-typical instruments in the following three ways, though such situations are not very likely to occur in reality:

- (a) either in a way characteristic of the instrument used but uncustomary for the object which is cut (e.g., cutting bread into two with an axe (at one blow)),
- (b) or in a way uncharacteristic of the instrument used but customary for the object which is cut (e.g., moving the edge of an axe on bread in a way we use a knife),⁹
- (c) or in a way uncustomary for both the instrument used and the object which is cut but as a result of a causative event, i.e., a not-whole physical object is coming into being like in case of the typical cutting and in cases (a) and (b) of the non-typical cutting (e.g., cutting a bar of soap with a thread).

Before turning to the third mechanism of contextual interpretation, i.e., conceptual selection, operating on utterance (1), it is reasonable to discuss, at least briefly, the problem of legitimation of distinction between conceptual shift and differentiation. Why should we assume two different interpretation mechanisms if in both cases a variable is specified to get literal meanings? Well, in case of *iskola* 'school', the variable x in (2) is specified, and in case of *elmegy* 'leave' a predicate variable is specified. However, these variables play different roles in lexical-semantic representations of the words in question (cf. Bierwisch 1983a). While in an utterance (in terms of logic) an argument is substituted for x bound by lambda-operator in (2), the predicate variable in the representation of *elmegy* 'leave' cannot be concretized by a constituent in an argument position, and therefore it is to be bound by an existential quantifier. That

⁹ A flat shingle is not an instrument and, consequently, it is not inherently assigned any goals. Nonetheless, it can occasionally be used to cut something in a way we cut with a knife. This cutting event could also be included in type (b).

is why one has to assume two mechanisms, namely conceptual shift and differentiation, according to the types of interpretation.

After introducing conceptual shift and differentiation in some detail, we can simply show the way in which the parts of the utterance meaning are co-ordinated in order to form an acceptable interpretation. Let us turn to example (1) again. In the context of the time adverbial in (1a), *iskola* 'school' most likely refers to an institution, and, accordingly, the verb *elmegy* 'leave' is interpreted as a change in affiliation. In (1b), *iskola* 'school' typically refers to a building and the verb *elmegy* 'leave' is interpreted as a change of place. Thus, depending on time-adverbial phrases, the literal meanings of *iskola* and *elmegy* in (1a–b), respectively, are co-ordinated. To put it differently, in utterance (1) the combination of literal meanings of *iskola* 'school' and *elmegy* 'leave' produced by conceptual shift and differentiation is regulated by the third above-mentioned operation of contextual interpretation, namely conceptual selection.

3. GLT and lexical pragmatics

Considering the lexicon not to be a sense enumerative component of the theory of language, Pustejovsky (1995; 1998) proposes a model in which words have a richer form of representation than they traditionally do but can also be underspecified in some respects. Furthermore, words are put together into complex linguistic units by means of composition rules which are more flexible than the earlier ones. Although Pustejovsky (1995, 232–6) does not make a distinction between linguistic and world knowledge, it is clear from his conception that GLT can contribute to lexical pragmatics in such a way as TCS does. Namely, GLT also assumes lexically encoded but underspecified meanings and meaning construction devices for larger units. However, at a closer look they are specific representation forms and particular generative operations of GLT. That is the reason why in the next subsection I will briefly introduce them and try to find their similarities with TCS and ways in which GLT and TCS complement each other.

3.1. The lexical representation and generative operations in GLT

Let us begin with the characterization of lexical entries. First, they involve the following four levels of representation: argument structure,

event structure, qualia structure and lexical inheritance structure. The qualia structure is at the core of the generative properties of the lexicon. It consists of four generative factors capturing how humans understand objects and relations in the world and inspired ultimately by Aristotelian *aitia*:

- (3) (a) FORMAL: the basic category that distinguishes an object within a larger domain,
- (b) CONSTITUTIVE: the relation between an object and its constituent parts,
- (c) TELIC: the object's purpose and function,
- (d) AGENTIVE: factors involved in the object's origin or "coming into being".

Second, GLT treats polysemic words as complex types, i.e., their meanings are drawn into complex types in order to grasp relations between them. The structure assumed for each set of meanings is a Cartesian type product. The product $\tau_1 \cdot \tau_2$, or $\tau_1.\tau_2$, of types τ_1 and τ_2 , each denoting sets, is the ordered pair $\langle t_1, t_2 \rangle$, where $t_1 \in \tau_1$, $t_2 \in \tau_2$.¹⁰ Furthermore, the semantics of complex types involves the relation R between elements of τ_1 and τ_2 .

Now let us take an example.

- (4) (a) Mary doesn't believe the book.
- (b) Peter put the book on the shelf.

The noun *book* denotes in two ways: in (4a) it refers to an information structure, and in (4b) to a physical object. One has to construct the corresponding complex type in order to treat these different meanings as a single type. If x equals information and y a physical object, then the complex (dot) type can be construed as $x.y$. The relation between the two meanings is that of "containment", i.e., *hold* (y, x), encoded as the FORMAL quale value. Considering all these details and also the purpose and origin of a book, the noun *book* and its Hungarian equivalent *könyv* have the representation (5), where e is an event variable:

¹⁰ However, while in general the Cartesian product is not commutative, Pustejovsky's dot operator cannot be commutative at all (Pustejovsky 1998, 298).

$$(5) \left[\begin{array}{l} \text{book/könyv} \\ \text{ARGSTR} = \left[\begin{array}{l} \text{ARG1} = x: \text{information} \\ \text{ARG2} = y: \text{phys_obj} \end{array} \right] \\ \text{QUALIA} = \left[\begin{array}{l} \text{FORMAL} = \text{hold}(y, x) \\ \text{TELIC} = \text{read}(e, w, x.y) \\ \text{AGENT} = \text{write}(e', v, x.y) \end{array} \right] \end{array} \right]$$

We should realize that the complex type $x.y$ occurs in the positions of arguments of predicates *read* and *write*. This is necessary in order to express the property of these predicates which the verbs *believe* and *put* in (4) do not have. Namely, the arguments of *read* and *write* refer to objects which are both physical object and information structure. Thus, Pustejovsky rejects the earlier representation *book/könyv* in which arguments of *read* and *write* belong to the simple type x .¹¹

If in (5) the complex type $x.y$ figures with the predicates *read* and *write*, this has the consequence that *book/könyv* has to have a third meaning in which the meanings ‘physical object’ and ‘information structure’ occur together. This complex meaning also appears in the case when there is no context which unambiguously indicates either ‘physical object’ or ‘information structure’, for instance, in (6):

(6) Mary likes the book.

The verb *like* itself does not require either of the above-mentioned meanings of *book*. Instead, one can think of “bookness” with respect to (6) and not of a specific aspect of the book.

In order that a single lexical representation of *book/könyv* indicate all of the three meanings, Pustejovsky introduces the notion of lexical conceptual paradigm (for short: lcp). It contains not only variables x and y , but also the complex type $x.y$:

(7) $\text{information.phys_obj lcp} = \{\text{information.phys_obj}, \text{information}, \text{phys_obj}\}$

Thus, one gets the following representation of *book/könyv* if (7) is built into (5) (cf. Pustejovsky 1995, 101, 116, 256, note 3):

¹¹ Interestingly, the representation of *book* without the complex type is not rejected in one place of Pustejovsky’s book (1995, 204).

$$(8) \left[\begin{array}{l} \text{book/könyv} \\ \text{ARGSTR} = \left[\begin{array}{l} \text{ARG1} = x: \text{information} \\ \text{ARG2} = y: \text{phys_obj} \end{array} \right] \\ \text{QUALIA} = \left[\begin{array}{l} \text{information.phys_obj_lcp} \\ \text{FORMAL} = \text{hold } (y, x) \\ \text{TELIC} = \text{read } (e, w, x.y) \\ \text{AGENT} = \text{write } (e', v, x.y) \end{array} \right] \end{array} \right]$$

However, the representation of other polysemic words may differ from that of *book/könyv* in the sense that the complex type does not occur in the characterization of any qualia. Since the word *sonata* denotes an event (the process of performance) and an information structure of a piece of music, Pustejovsky (1995, 174) proposes (9):

$$(9) \left[\begin{array}{l} \text{sonata} \\ \text{ARGSTR} = \left[\begin{array}{l} \text{ARG1} = x: \text{music} \end{array} \right] \\ \text{EVENTSTR} = \left[\begin{array}{l} E_1 = e_1: \text{process} \end{array} \right] \\ \text{QUALIA} = \left[\begin{array}{l} \text{music.process_lcp} \\ \text{FORMAL} = \text{perform } (e_1, w, x) \\ \text{TELIC} = \text{listen } (e', z, e_1) \\ \text{AGENT} = \text{compose } (e'', y, x) \end{array} \right] \end{array} \right]$$

The qualia structure of (9) only has the constituent elements of complex type *music.process* and the relation between them is expressed by means of the predicate *perform* with the category FORMAL.

It is worth looking at the representation of the word *newspaper*, which has a more complex type. This noun refers not only to an information structure and a physical object but also to an organization (institution). Therefore, the representation of *newspaper* is the following (Pustejovsky 1995, 156):

$$(10) \left[\begin{array}{l} \text{newspaper} \\ \text{ARGSTR} = \left[\begin{array}{l} \text{ARG1} = x: \text{organization} \\ \text{ARG2} = y: \text{information.phys_obj} \end{array} \right] \\ \text{QUALIA} = \left[\begin{array}{l} \text{organization.information.phys_obj_lcp} \\ \text{FORMAL} = y \\ \text{TELIC} = \text{read } (e, w, y) \\ \text{AGENT} = \text{publish } (e', x, y) \end{array} \right] \end{array} \right]$$

Although it is not explicit in (10), Pustejovsky remarks that *newspaper* cannot denote the entire complex type, i.e., it can have no reference to types both *organization* and *information.phys_obj* at the same time.

Now let us turn to type coercion and co-composition by means of which meanings of complex expressions, i.e., contextual meanings are construed in GLT.¹² Consider (11):

- (11) (a) Mária elkezdte/folytatta/befejezte a könyvet.
 Mária.nom began/continued/finished.def.3sg the book.acc
 'Mária began/continued/finished the book.'
- (b) Mária elkezdte/folytatta/befejezte a könyv olvasását.
 Mária.nom began/continued/finished.def.3sg the book.nom reading.poss.acc
 'Mária began/continued/finished reading the book.'
- (c) Mária elkezdte olvasni a könyvet.
 Mária.nom began.def.3sg to.read the book.acc
 'Mária began to read the book.'

According to GLT, the semantic relation between the occurrences of verbs *elkezd* 'begin', *folytat* 'continue' and *befejez* 'finish' in (11a) and (11b–c) is expressed by means of type coercion. This rule provides for the direct object argument of verbs at stake to belong to the semantic type of events, independently of the form of its grammatical realization (cf. Pustejovsky 1995; 1998). Furthermore, the relevant event, necessary for the semantic well-formedness of (11a), is encoded in the lexical-semantic representation of the noun *könyv* 'book'. The representation of *book/könyv* we saw in (8) suggests that the purpose of a book (the TELIC role) is to read it. If one takes this piece of information into account, it is guaranteed that, according to type coercion, the verbs *elkezd* 'begin', *folytat* 'continue' and *befejez* 'finish' are connected with an event in (11a), where—unlike (11b–c)—the predicates *olvasás/olvas* 'reading/read' are not lexically expressed. However, the AGENTIVE role provides a further meaning: (11a) might mean not only (11b–c) but also that Mária began/continued/finished writing (or to write) the book. So, in (11a) there can be another implicit predicate because of another quale role of *book/könyv*.

Two additional remarks seem to be in order with respect to (11a). First, since the lexical-semantic representation of *book/könyv* gives two ways of construing the meaning of (11a), its disambiguation needs some

¹² In GLT there is a third mechanism, i.e., selective binding, which is not dealt with in this paper (for a discussion of it, see Pustejovsky 1995, 127–31).

contextual support. To put it differently: in order to interpret an utterance such as (11a), one needs some pieces of contextual information. Only in this case can one choose either the predicate *read* or the predicate *write* from the two lexically given possibilities, offered by the representation of *book/könyv*. Second, like the interpretations of (1), the meanings of (11a) constructed on the basis of (8) are only typical, or default, readings (Pustejovsky 1998, 304), because they can be overridden in a wider context. Below I have to return to this question several times.

To see how the other mechanism of GLT, i.e., co-composition, works, let us consider (12):

- (12) (a) Az üveg/Péter a folyóban úszik.
 the bottle/Péter.nom the river.ine floats/swims.indef
 ‘The bottle/Péter is floating/swimming in the river.’
 (b) Az üveg/Péter a barlangba úszik.
 the bottle/Péter.nom the cave.ill floats/swims.indef
 ‘The bottle/Péter is floating/swimming into the cave.’

Relying on Pustejovsky (1995, 125–6), one may explain the systematic polysemy exhibited by (12) in the following way. The verb *úszik* ‘float/swim’ has only one meaning in the lexicon, which expresses the process and manner of motion (see (12a)). The meaning ‘to move in some direction in some manner’ appearing in (12b) does not belong to the verb *úszik* ‘float/swim’ itself, but to the phrase consisting of this verb and the inflexional noun. This second, more complex meaning, associated not with a direction inherent in any motion but with a transition from an initial point to an end, cannot be derived from the constituent parts, i.e., the verb and inflected noun, by means of a simple rule of composition. One has to assume that the inflected noun also behaves like a functor (predicate) in respect to *úszik* ‘float/swim’. Consequently, the meaning of the phrase *a barlangba úszik* ‘is floating/swimming into the cave’ is constructed by the operation which allows for several constituents to be considered functors in a simple construction and which, therefore, is called co-composition in GLT (see also Pustejovsky 1995, 122–5; Pustejovsky 1991, 62–4).

In the remaining part of this section, through comparing GLT with TCS, I show my proposals modifying GLT’s conception of lexical-semantic representation and generative procedures.

3.2. Proposals concerning lexical-semantic representation

Meaning representations in the lexicon are underspecified both in TCS and in GLT. However, this character of representation has different sources. In case of the definition '*x* has the goal to provide for teaching/learning processes' in (2), it derives from the presence of variable *x*, and in case of the verb *elmegy* 'leave' from the abstract component MOVE. At the same time, in representations (8)–(10) it originates from the content of the lexical conceptual paradigm, which contains more than one meaning. Like the alternation of primary literal meanings of *iskola* 'school', i.e., 'institution' and 'building', no single basic meaning is highlighted in the lcp. Without finishing the enumeration of arguments for the conceptions of either TCS or GLT, I indicate two features characteristic of representations in GLT but not in TCS. First, the complex type and lcp guarantee expressing the joint appearance of some meanings, i.e., the reference of a polysemic word to the complex type. However, it is not always clear on the basis of lexical-semantic representations when this is possible and when it is not (see the complex type *organization.information.phys_obj* in (10)). Second, the category FORMAL in the qualia structure encodes the relationship between the simple types which form the complex one (see also the quale AGENTIVE of *newspaper: publish* (*e'*, *x: organization*, *y: information.phys_obj*)).

However, a problem emerges in connection with (8)–(10): How can GLT treat the other, non-metaphorical meanings of *book/könyv*, *sonata*, *newspaper*. Let us take *book/könyv* again and recall the distinction between primary and non-primary literal meanings as well. Then one can state that the primary literal meanings of *book/könyv*, i.e., 'information structure' and 'physical object', established in Bibok (1999), coincide with the meanings captured also by Pustejovsky's analysis. As for the non-primary literal meanings that can be attached to primary ones, consider (13):¹³

- (13) (a) Peter is weary of the book.
 (b) One of the sources of knowledge remains the book.

¹³ In what follows I discuss English equivalents of the original Hungarian examples with *book*-type nouns because these languages do not differ in polysemic structures under analysis.

In (13a) the noun *book* can be interpreted as an activity concerning the book and in (13b) as not a simple information structure but a type of that. If one claims that the predicate *be weary of* has the argument from the set of events, the meaning 'activity' can be provided through the categories TELIC and AGENTIVE in the qualia structure of *book/könyv*. How do we give an account of the meaning 'type of information structure' in the framework of GLT? Before answering this question, let us turn to *sonata* and *newspaper* again. The noun *sonata* was analysed as one that belongs to *book*-type nouns (Bibok 1999) because the meanings of *book/könyv* are also characteristic of it. However, these meanings have to be complemented with others:

- (14) (a) The pianist is weary of the sonata.
 (b) The culmination of the concert was the sonata.
 (c) Yesterday I borrowed the sonata from the audio library.

In (14a) the noun *sonata* is interpreted as an activity but in the first place, perhaps, not as a functional or creative activity (cf. the predicates *listen* and *compose* in (9)), but rather as practising and rehearsing, in general, as playing a piece of music. In (14b) one can think of a particular part of this activity, namely of a given performance, publishable later, for example, on cassette (= physical object₂) (cf. (14c)).

As to the noun *newspaper*, it has an even more complicated polysemic structure:

- (15) (a) In 1975 Peter left the newspaper.
 (b) The newspaper took part in the demonstration.

As (15a) and (15b) show, beside the meanings characteristic of *book/könyv*, the noun *newspaper* can be used with the meanings 'institution' ('organization') and 'ensemble of people', customary for *school*-type nouns. In the representation of *newspaper* in (10), however, it is only referred to the former.

Moreover, in an example such as (16) below, the activity which Peter is weary of can be connected to the physical object, information structure, complex type *information.phys_obj* or institution:

- (16) Peter is weary of the newspaper.

In order to treat all the above-mentioned meanings of *book*, *sonata* and *newspaper* in the framework of GLT, more complex types have to be in-

troduced into their lexical conceptual paradigm. Of course, there is no principled reason not to do so, provided that the relationship between meanings is expressed. It is true that for *newspaper* one can assume a lexical conceptual paradigm somewhat different from that in (10) (Pustejovsky 1995, 155). It includes the type *printed_matter*, posited on the same level in the type hierarchy as *organization* and conceived as a type which equals the complex type consisting of the simple types *information* and *physical_object*:

(17) *newspaper_lcp* = {*printed_matter.organization*, *printed_matter*, *organization*}

Because of the necessary distinction between primary and non-primary literal meanings, however, this solution cannot be extended to all of the above-mentioned meanings of words *book*, *sonata* and *newspaper*. Primary meanings relate to non-primary ones in another way than complex types and their (ultimately simple) constituents do. Non-primary meanings are produced by means of attaching some meaning components to primary meanings (Bibok 1999; 2000). In the case of *school*-type nouns, the component 'ensemble of people' has to be attached to 'institution' and 'building' or, in GLT, to the lexical conceptual paradigm *institution.building_lcp*. In the case of *book*-type nouns, the component 'activity' has to be tied to 'information structure' and 'physical object' or, in GLT, to the lexical conceptual paradigm *information.phys_obj_lcp*. In addition, another non-primary meaning is derived from a non-primary one in the same way: 'activity' is attached to 'ensemble of people' (in case of *school*-type nouns), then 'element of activity' to 'activity' (in case of some *school*- and *book*-type nouns, see, e.g., *sonata*), and then 'physical object₂' to 'element of activity' (in case of some *book*-type nouns, see again *sonata*). Hence, from the previous discussion we have to conclude that the polysemy at issue cannot be treated via the postulation of more complex types. Without finishing the comparison of the conceptions of meaning representation in GLT and TCS, I can state that (8)–(10) should be completed anyway in order to reach more full-fledged representations of the polysemy characteristic of *book/könyv*, *sonata*, *newspaper* and in general of *book*- and *school*-type nouns.

3.3. Proposals concerning generative devices

In this subsection I examine unavoidable modifications of type coercion and co-composition.¹⁴ Let us first consider (18), in which, unlike in (11), the subject position is filled in with common nouns such as *író* ‘author’ and *fordító* ‘translator’ and not with proper names.

- (18) (a) Az író elkezdte/folytatta/befejezte a könyvet.
 the author.nom began/continued/finished.def.3sg the book.acc
 ‘The author began/continued/finished the book.’
- (b) A fordító elkezdte/folytatta/befejezte a könyvet.
 the translator.nom began/continued/finished.def.3sg the book.acc
 ‘The translator began/continued/finished the book.’

How does the change of words in subject position effect the interpretation of (18a) and (18b)? In the former the noun in the subject position confirms one of the lexical possibilities, encoded in the quale AGENTIVE of *book/könyv*: ‘The author began/continued/finished writing the book.’ In the latter utterance, however, the noun *fordító* ‘translator’ overrides the information in both the TELIC and AGENTIVE roles of *book/könyv*. Thus, we get the following interpretation: ‘The translator began/continued/finished translating the book.’ It is worth noting that these interpretations seem to be only default (typical) ones because a wider context may change them.

Consequently, the event necessary for the construction of utterance meaning can be provided not only by the categories TELIC or AGENTIVE, but also the words in subject position may have an effect on utterance meaning. Without any further contextual specificity, they confirm either the events guaranteed by the lexical-semantic representation of words in object position, or they override the information accessible on the basis of the lexicon. In some cases, however, it is obligatory to get over the object argument of the verbs *elkezd* ‘begin’, *folytat* ‘continue’ and *befejez* ‘finish’ in order to reach an appropriate utterance meaning. Although the function of the car is to drive it (Pustejovsky 1995, 113), the phrase *begin a car* does not mean ‘begin to drive a car’ (Fodor-Lepore 1998, 281). Let us take (19) to analyse this problem in more detail.

¹⁴ An earlier version of these proposals appeared in Bibok – Németh T. (2001).

- (19) Öt perccel ezelőtt a szerelő elkezdte a kocsit.
 five minute.ins ago the mechanic.nom began.def.3sg the car.acc
 'Five minutes ago the mechanic began the car.'

If knowledge about the function of the car or the factors involved in the object's origin do not result in an adequate utterance interpretation, one can rely on the noun featuring in the subject position of the verb *elkezd* 'begin'. Let us suppose that the noun *szerelő* 'mechanic' denotes a person whose profession is to repair cars and similar vehicles according to the TELIC quale¹⁵ or to the second argument of GOAL component. This representation of *szerelő* 'mechanic' helps to get the relevant interpretation of (19): 'Five minutes ago the mechanic began repairing the car.'

On the basis of the above, I want to stress that there is a good reason to distinguish two things with respect to the rule of type coercion. Since it is possible or even necessary in some cases to take into account nouns in the subject position, the component of construction of utterance meaning which provides for the relevant event to begin/continue/finish etc. has to be separated from type coercion itself, which appears in connection with the object argument of the verb *elkezd* 'begin', *folytat* 'continue', *befejez* 'finish' etc.

It is also obvious from the above discussion that—in connection with the possibility of interpretations provided by qualia structures of nouns in non-object position—there is another problem of type coercion: How are the meanings expected on the basis of Pustejovsky's proposal excluded as incorrect? The unproductivity of type coercion has different reasons, so it can be accounted for in several ways (cf. Trón 2002, 300–6). First, there may be a selection restriction which constrains availability of a quale of a particular noun (see Fodor–Lepore's remark concerning *begin a car*). Second, a selection restriction can be postulated to put a constraint on the application of a quale. For example, the verb *enjoy* selects the TELIC quale of a noun if the event in that quale denotes perception or consuming. Cf. *enjoy the film/beer* vs. **enjoy the doorknob/federal government/carpet tack* (the ill-formed phrases are Fodor–Lepore's 1998, 281). Third, it may be lexicalized in a verb what serves as an event, independently of the qualia structure of the argument: e.g., *want a book/bicycle* 'want to have a book/bicycle'.¹⁶

¹⁵ Cf. representation of such a word as *typist* in Pustejovsky (1995, 128).

¹⁶ As one of the reviewers suggested, the fact that type coercion based on qualia structures does not operate in the case of a particular phrase may be captured by

After modifying the type coercion rule, I turn to a critical evaluation of Pustejovsky's co-composition. To begin with, let us consider further pairs of examples illustrating some verbs that vary the same way as *úszik* 'float/swim' in (12) does:

- (20) (a) Péter a járdán szalad/rohan.
 Péter.nom the pavement.sup runs/rushes.indef
 'Péter is running/rushing on the pavement.'
- (b) Péter a járdára szalad/rohan.
 Péter.nom the pavement.sub runs/rushes.indef
 'Péter is running/rushing onto the pavement.'
- (21) (a) A balerina a párja előtt forog.
 the ballerina.nom the partner.poss.nom in.front.of spins.indef
 'The ballerina is spinning in front of her partner.'
- (b) A balerina a párjához forog.
 the ballerina.nom the partner.poss.all spins.indef
 'The ballerina is spinning to her partner.'
- (22) (a) Péter a szőnyegen könyököl/guggol.
 Péter.nom the carpet.sup leans.on.one's.elbows/crouches.indef
 'Péter is leaning on his elbows/crouching on the carpet.'
- (b) Péter a szőnyegre könyököl/guggol.
 Péter.nom the carpet.sub leans.on.one's.elbows/crouches.indef
 'Péter is leaning on his elbows/crouching onto the carpet.'

The examples demonstrate that the sort of polysemy at stake is characteristic of utterances containing verbs whose lexical meanings have a motion component denoting change of place (cf. (12) and (20)) or change of position (cf. (21)), or do not have such a component at all (cf. (22)).

Considering (12) and (20)–(22) more carefully, I want to point out that in the (b)-examples—in comparison with the (a)-examples containing local expressions—there is a change of the argument structure because the verbs take directional arguments. Although knowledge of the change of argument structure is sufficient from the point of view of the argumentation below, one also has to make the initial argument structure clear

blocking, which, I supposed in section 2, explains the failure of alternation of 'institution' and 'building' of the nouns *kormány* 'government' and *palota* 'palace'. To be sure, the unproductivity of type coercion is an issue which requires further investigation.

for the complete description. Let us examine it with the verbs in (12a), (20a), (21a) and (22a). If we agree with Pustejovsky (1995, 125) in whose opinion there is no local argument in the argument structure of *float*, the verbs *úszik* 'float/swim', *szalad* 'run', *rohan* 'rush', *forog* 'spin', *könyököl* 'lean on one's elbows' and *guggol* 'crouch' would be one-argument verbs and, consequently, the nouns with local inflexions or postpositions would function as adjuncts. The fact that the nouns in question can be omitted in some utterances seems to support this idea. However, one can think of them as arguments on the basis that localization is inherently involved in being in motion or position in some manners. Hence, the verbs *úszik* 'float/swim', *szalad* 'run', *rohan* 'rush', *forog* 'spin', *könyököl* 'lean on one's elbows' and *guggol* 'crouch' are two-argument verbs, that is, local arguments are indispensable in their argument structure. In this case the omission of the nouns with local inflexions and postpositions in some utterances can be explained as remaining implicit on the syntactic level, but on the semantic level the number of arguments does not decrease at all.

At this point the following question arises: given that the meanings of (b)-examples are construed by a co-composition of verbs and nouns with local inflexions/postpositions, what constitutes the information on the basis of which these verbs and their directional arguments can co-occur? Offering a co-compositional amalgamation of constituents of a construction, Pustejovsky does not deal with how verbs playing the role of predicates semantically select their arguments and how arguments behaving also as functors semantically select verbs. If taking directional arguments were not an idiosyncratic property of the verbs at issue, perhaps, one could formulate a lexical rule changing the argument structure, like Komlósy does (1992, 352–4) in case of the verbs which originally mean the manner of a motion. In the sense of such a solution if a verb denotes a manner of motion or a spatial position, a directional argument appears with it. This rule of changing the argument structure has no general validity in the range of lexemes with relevant meaning components. On the one hand, one also has to take into account if a directional argument is lexically fixed (cf. *heveredik* 'lie down at full length'), the use of the rule is blocked in case of the verb denoting the corresponding manner (*heverészik* 'be lying'). On the other hand, let us consider the statement that only a small group of verbs which denote the manner of a motion of inanimate things that are able to move in consequence of external effects is suitable for expressing the proceeding motion (Komlósy 2000, 257). The point of this statement is that the group of verbs under

discussion does not behave homogeneously. For example, the verb *inog* 'wobble' does not take any arguments referring to an end-point but the verb *pattog* 'bounce' does. Cf.

- (23) (a) Az asztal sokáig inog a fal mellett / a padlón
 the table.nom for.long wobbles.indef the wall.nom by / the floor.sup
 (majd felborul).
 then falls.over.indef
 'The table wobbles for a long time by the wall / on the floor (then it falls over).'
- (b) *Az asztal a fal mellé / a padlóra inog.
 the table.nom the wall.nom to / the floor.sub wobbles.indef
 'The table wobbles to the wall / onto the floor.'
- (24) (a) A labda sokáig pattog a fal mellett / a padlón.
 the ball.nom for.long bounces.indef the wall.nom by / the floor.sup
 'The ball bounces for a long time by the wall / on the floor.'
- (b) A labda (az asztaltól) a fal mellé / (az asztalról)
 the ball.nom the table.abl the wall.nom to / the table.del
 a padlóra pattog.
 the floor.sub bounces.indef
 'The ball bounces (from the table) to the wall / onto the floor.'

Even if one formulated the rule of changing the argument structure, also handling correctly exceptions in connection with verbs of manner of motion and spatial position, it would result in a solution that ultimately each verb in question would be represented in the lexicon twice according to its two different argument structures. We should realize that if we want to treat the selection from the other direction, i.e., how arguments choose verbs, we would encounter the same difficulties.

Thus, we have come to a contradiction not only with the requirement of economy of lexical representation (Bierwisch 1997), but also with one of the fundamental efforts of GLT. Recall that GLT assumes a number of generative devices that are used to contextually construct semantic expressions, rather than enumerating meanings in the lexicon. Co-composition can be regarded as a device to produce the actual, contextually evoked senses only in case the change of argument structure is given account of without duplicating lexical entries with two different selectional properties.

If, to the facts enumerated in 3.3, we add that both GLT and TCS admit the possibility of underspecification of lexical-semantic representations, I can propose the following to avoid the problem of co-composition. Each verb in (12), (20)–(22) and (24) has to be treated as a single lexical item. It joins the meanings appearing in both (a)- and (b)-lines but contains all that is relevant for the directional argument structure in (b)-examples only as an optional part of the representation. At the same time, this modification of the generative device in question means that both utterance meanings are derived co-compositionally. As to the part of representations necessary to treat the examples in the (b)-lines, it can be depicted as (25) in view of the totality of the verbs discussed:

(25) $[[\text{MOVE } x] : [\text{FIN } [\text{LOC } x] \alpha [\text{LOC } u]]]$

The formula (25) reads as follows: x moves so that the place $[\text{LOC } u]$ to which x moves has a relation symbolized by α , such as ‘in’, ‘on’, ‘under’, ‘behind’, ‘by’ etc., to the end of a path, which is the result of applying the component FIN to x ’s place, i.e., $[\text{LOC } x]$.

In the meaning representations of verbs such as *úszik* ‘float/swim’, *szalad* ‘run’, *rohan* ‘rush’, *pattog* ‘bounce’, *forog* ‘spin’, *könyököl* ‘lean on one’s elbows’, *guggol* ‘crouch’, *inog* ‘wobble’, *heveredik* ‘lie down at full length’ and *heverészik* ‘be lying’, one can use (25) in the following way:

- (a) If the meaning ‘move in some direction in some manner’ is lexicalized (e.g., *heveredik* ‘lie down at full length’), the formula (25) is an obligatory part of the representation of the verb and not optional. Of course, the lexicalization of the other meaning under discussion (e.g., *heverészik* ‘be lying’) makes (25) unnecessary.
- (b) The meaning component FIN is bracketed as an optional part of the representation in case of all verbs excluding lexicalized meanings. It becomes relevant in such contexts as the (b)-examples above.
- (c) If there is not a local argument in an argument structure—as Pustejovsky (1995, 125) treats the verb *float*—, the formula $[[\text{LOC } x] \alpha [\text{LOC } u]]$ expressing spatial location has to be put into round brackets as an optional part of the representation. This formula is needed when the meaning component FIN is activated in the (b)-lines. However, if one insists that the localization is involved in being in motion or position in some manners and, consequently, the verbs under discussion are two-argument verbs, the expression $[[\text{LOC } x] \alpha [\text{LOC } u]]$ never appears in round brackets.

- (d) As to the formula [MOVE x], it is quite natural that it has to be bracketed if the verb in the (a)-line does not refer to a motion but a state (*könyököl* 'lean on one's elbows' and *guggol* 'crouch'). In contrast with this, if some verbs (e.g., *úszik* 'float/swim', *szalad* 'run', *rohan* 'rush', *pattog* 'bounce', *forog* 'spin') refer to the motion in the (a)-lines, the part [MOVE x] of formula (25) must not be optional in the representations of these verbs.

Thus, we have created a modified version of co-composition giving the meaning of a phrase so that arguments change the abstract, underspecified meaning representations of verbs containing some of their parts in round brackets into concrete ones. This concretization can be done either by the omission of meaning elements in round brackets, e.g., FIN in case of the inflected noun *folyóban* 'in river' in (12a), or by taking bracketed components into consideration, e.g., FIN in case of the inflected *barlangba* 'into cave' in (12b). This latter operation technically equals the deletion of round brackets indicating the optionality in meaning representations. The modified version of co-composition can also be applied to cases where the problem concerning the change of argument structure does not occur, e.g., in (26):

- (26) (a) Péter kilépett a templomból.
 Péter.nom left.indef.3sg the church.ela
 'Péter left the church (= the building).'
- (b) Péter kilépett az egyházból.
 Péter.nom left.indef.3sg the church.ela
 'Péter left church (= the institution).'

The underdetermined representation of the verb *kilép* 'leave' is not captured by means of putting optional parts into round brackets, like in the representations of the verbs in (12), (20)–(22) and (24). Rather, the meaning component MOVE figures in a very abstract meaning, as in case of the verb *elmegy* 'leave' in (1). The component MOVE is only concretized and refers to a physical motion (change of place) and a "social motion" (change in affiliation), depending on the directional (source) arguments *templomból* and *egyházból* with lexically fixed meanings 'church as building' and 'church as institution', respectively.

Now let us recall the examples treated as cases of conceptual selection in section 2. For the sake of convenience I repeat them here:

- (1) (a) 1975-ben Péter elment az iskolából.
 1975.ine Péter.nom left.indef.3sg the school.ela
 'In 1975 Péter left school.'
- (b) Délelőtt tíz órakor Péter elment az iskolából.
 morning ten o'clock.tem Péter.nom left.indef.3sg the school.ela
 'At ten o'clock in the morning Péter left the school.'

It is easy to realize that the meanings of utterances in (1) can also be construed by means of the modified version of co-composition. One additional point that we have to add to what has been said so far is that because of the underspecified character of the noun *iskola* 'school', only further contexts, namely the time adverbials *1975-ben* 'in 1975' and *délelőtt tíz órakor* 'at ten o'clock in the morning', lead to the typical readings of (1a) and (1b).

3.4. On the relation between TCS and GLT in general

To conclude my critical assessment of GLT, I want to make some remarks about the connection of TCS and GLT. As for lexical-semantic representation, I want to point out once more that both conceptions admit the possibility of underspecification of lexical entries. There are differences in regard to the manifestation of this underspecified character of representations, but TCS itself uses several formats according to different lexemes, cf. variables bound by lambda-operators and existential quantifiers as well as optional components in round brackets. The latter form of representation is essentially equal to the solution of GLT when several—but not all—meanings of a word appear in a single representation. It is worth noting that this manner of representation of polysemy was proposed in TCS not only for verbs but also for nouns. Pethő (1998) introduced the mechanism of conceptual focussing, details of which—because of space limitations in the present paper—I cannot go into, but I want to mention two features of the representations of *school*-type nouns where this mechanism provides a superior explanation. First, it eliminates the problem concerning the interpretation difference of the meaning component GOAL in cases of 'institution' and 'building' (Taylor 1994). According to Pethő's solution, only the institution has the goal to provide for teaching/learning processes, but the goal of the building is to provide the location for the institution. Second, in contrast with Taylor's (1994) and Kiefer's (2000) analyses based on the metonymical relation between

meanings, Pethő does not reject the assumption of TCS about the underspecification of lexical-semantic representations. This latter point of view coinciding also with that of GLT can be fully accepted in the light of the above discussion. However, I want to stress that if one takes into account various possibilities of underspecification in the framework of TCS, Taylor's objection against the homogeneous interpretation of the meaning component GOAL does not raise any problems at all. Like the abstractness of MOVE in representations of *elmegy* and *kilép* (both 'leave'), GOAL can be treated as a meaning component which is not specific in respect to whether it concerns an institution or a building (cf. the variable x in (2)). In addition, the above-mentioned difference of interpretations of GOAL and the relation between the meanings 'building' and 'institution' can be captured via the qualia structure of GLT, similarly to the quale FORMAL of *book/könyv*, i.e., *hold* (y : *physical object*, x : *information*).

Now let us compare the forms of lexical-semantic representations in TCS and GLT with each other once again. With a constraint, one can neglect the differences in the forms of underspecification. The constraint concerns the distinction between language knowledge and world knowledge, which may be connected with various manners of representation. Nonetheless, in the remaining part of the present paper I will ignore this distinction since another one is relevant for the delineation of lexical pragmatics. As has been indicated in 1, the point is how the great number of meanings appearing in contexts are inferred from lexically encoded information. Hence, over and above the similarities it has to be stressed how the lexical representations applied in TCS and GLT complement each other. So, I want to sum up the discussion from this point of view. As far as GLT is concerned, there are the following ideas which TCS should bear in mind: the qualia structure, the meaning expressed by the complex type, and the relationship between types forming the complex type. As to TCS, it could direct the attention of GLT to various ways of being underspecified and the more comprehensive handling of some polysemic words.

In the field of proposing mechanisms yielding contextual meanings, there is a clear desire to establish more complex ways of composition than in its classical versions. This endeavour resulted in the elaboration of similar devices, i.e., conceptual selection in TCS and co-composition in GLT. At the same time, both theories propose such procedures, namely conceptual differentiation (TCS) and type coercion (GLT), which make the repertoire of construing utterance meaning more full-fledged. Fur-

thermore, it is important that the modifications offered in connection with type coercion and co-composition in 3.3 have led to the more significant role of contexts and, consequently, to the more underspecified character of lexical-semantic representations.

4. RT and lexical pragmatics

4.1. Decoding and inference in RT

To outline how Relevance Theory contributes to lexical pragmatics and how it co-operates with TCS and GLT in that framework, let us start with the following. According to RT, utterance interpretation consists of two phases: of decoding the linguistically encoded information resulting in the logical form and of executing relevant inferences. These two operations provide the assumptions intended in communication, i.e., the mental representations considered as representations of the possible world in question: decoding and inference yield explicatures. However, (conversational) implicatures are created only by means of inferential processes.

Before considering the elements of relevance theoretical interpretation one after the other in more detail, let us turn to two principles of Relevance. The Communicative Principle of Relevance says that every utterance (and, ultimately, every communicative act) conveys a presumption of its own optimal relevance (Sperber–Wilson 1995, 158). An utterance is optimally relevant if, on the one hand, it has enough contextual effects in order to be worth the communicative partner's processing effort, and, on the other hand, if it does not require the communicative partner's unnecessary processing efforts. The contextual effects which we get by means of the processing of utterances in contexts may have three types (*ibid.*, 108–17). Newly represented assumptions either (a) strengthen old assumptions, (b) eliminate contradictions existing between the old assumptions, or (c) result in new conclusions when they inferentially combine with old ones. Contexts are not given in advance, but the communicative partner chooses the corresponding one during construing the utterance meaning so that his/her expectations concerning relevance are fulfilled. Further, if it is necessary, immediate contexts can be extended. Extended contexts emerge in the following three ways: (a) when the interpreter takes into consideration information originating from a not immediately preceding utterance of discourse, (b) when he/she includes encyclopedic information connected to concepts figuring in the utterance or already processed

in the context, and (c) when he/she integrates information from the immediately observable environment (*ibid.*, 132–42).

Sperber and Wilson hold that communication is one of the important manifestations of human cognition and, according to this, the requirement of relevance is valid for the whole of human cognition. They formulate the Cognitive Principle of Relevance (*ibid.*, 260): human cognition is geared towards the maximization of relevance. To put it differently, the human mind not only aims at seeking and justifying relevance but also at achieving as many contextual effects as possible for as little processing effort as possible.¹⁷

Returning to the two phases of utterance interpretation, it has to be stressed that the resulting logical form is always incomplete. To get a full-fledged proposition, at least reference assignment and disambiguation are to be executed. Even if a complete propositional form is arrived at in this way, its enrichment is required to develop the proposition expressed by the given utterance. Consider this example from Wilson–Sperber (2002, 607):

- (27) (Lisa drops by her neighbours, the Joneses, who have just sat down to supper.)
 Alan Jones: “Do you want to join us for supper?”
 Lisa: “No, thanks. I’ve eaten.”

Decoding Lisa’s second utterance (with the assumption that the verb *eat* is not ambiguous) and assigning references, one can get the complete proposition in (28):

- (28) ‘At some point in a time span whose endpoint is the time of utterance, Lisa has eaten something.’

However, (28) says less than Lisa intended to communicate with her utterance. For this (28) has to be expanded according to the Communicative Principle of Relevance:

- (29) ‘Lisa has eaten supper that evening.’

In the framework of RT, (29) is called explicature (Sperber–Wilson 1995, 182), coined analogously with the commonly used term *implicature* of Gricean pragmatics.

¹⁷ For a reduction of the Communicative Principle of Relevance and other (Gricean and neo-Gricean) pragmatic principles onto the Cognitive Principle of Relevance, see Németh T. (2004).

Furthermore, on the basis of Lisa's second utterance, Alan can also infer some implicatures, again in accordance with the Communicative Principle of Relevance. An implicit premise and an implicit conclusion, derivable from this premise and (29), figure in (30) and (31), respectively:

(30) 'The fact that one has already eaten supper on a given evening is a good reason for refusing an invitation to supper that evening.'

(31) 'Lisa is refusing supper with us because she has already had supper this evening.'

Following Grice (1978), neo-Gricean pragmatics (see, e.g., Levinson 2000) maintains that implicatures are cancellable without giving rise to a contradiction. Post-Gricean RT, however, claims that it is pragmatic inference quite generally that is defeasible. In other words, since pragmatic inference plays a considerable role in the derivation of explicatures, elements of the explicit content of utterances are also cancellable. And since certain entailments may be implicatures, not all implicatures are cancellable. (For details see Carston 2002, 134–52.) Here it is important to emphasize that cancellability/defeasibility of elements of utterance meaning also appears in TCS (cf. expressions *most likely* and *typically* with regard to interpretations of (1)) and in GLT (cf. typical, or default, readings of (11a)).

Let us return to explicatures, which have two further kinds. First, if a proposition expressed by an utterance is embedded in a description of the speaker's propositional attitude, a speech act description or some other comment on the embedded proposition, it is called higher-level explicature (Wilson–Sperber 1993, 5). Second, there are situations when the speaker does not intend to communicate the proposition expressed by an utterance but another representation with which it is in a relation of resemblance. In such cases only the latter represents the speaker's explicit meaning. This is the case when the speaker communicates unencoded meanings by way of loose use (Wilson–Sperber 2002). A kind of loose use is metaphor, which I will examine now in more detail from the point of view of RT. Song (1998) mentions the following problems concerning previous pragmatic approaches to it:

- (a) It is not entirely clear where the borderline between literal and metaphorical interpretations is.
- (b) As a consequence of (a), the statement that the literal interpretation of the whole utterance always precedes the metaphorical one is questionable.

- (c) Processing utterances does not involve choosing one set of interpretations from an exhaustive list of possible interpretations.
- (d) Defectiveness of literal interpretations is not a necessary condition of a metaphorical utterance.
- (e) The notion of similarity making the metaphorical interpretation possible is not well elaborated.

RT's approach to metaphor is superior to earlier pragmatic approaches because it provides a more general account of the interpretation of both metaphorical and non-metaphorical utterances without relying on the distinction between literal and metaphorical meanings (Song 1998, cf. also Wilson-Sperber 2002).

After the survey of roles which inference plays in finding the intended information, i.e., explicatures and implicatures, it is necessary to sketch out the types of information encoded in utterances. The novelty of RT in this respect is the delineation of procedural meanings from conceptual ones (Wilson-Sperber 1993). The former are characteristic of linguistic expressions whose encoded meaning imposes a constraint or instruction on the pragmatic inferential phase of utterance interpretation. Encoded procedural pieces of information constrain the propositions expressed (through personal pronouns such as *I* and *you*), higher-level explicatures (through discourse particles such as *eh*) and implicatures (through discourse connectives such as *so* and *after all*).

The conceptual meanings are characteristic of linguistic forms whose encoded meaning contributes concepts to the propositions expressed (most words belonging to independent or major parts of speech; for examples, see below) and higher-level explicatures (sentence adverbials, including illocutionary adverbials such as *seriously* and *frankly*).¹⁸ In connection with conceptual meaning, the most important question from the present point of view is how RT represents concepts. Accepting the holistic view advocated by Fodor et al. (1980), Sperber and Wilson (1995, 86–93) consider concepts as entities that cannot be defined in terms of, or decomposed into, more primitive components. Although in this sense the concepts themselves are wholes, the information that may be stored in memory at a conceptual label falls into three distinct types: logical, encyclopedic and lexical. Logical information consists of a set of deductive

¹⁸ According to Wilson and Sperber (1993) discourse connectives are best analysed not only in procedural terms but also as cases of explicit communication rather than as cases of Gricean conventional implicatures.

rules which apply to logical forms of which that concept is a constituent. The rules yield outputs from which the given concept has been removed. Hence they are called elimination rules. For example, the logical rule of *and*-elimination takes as input a single conjoined premise and yields as output one of its constituent conjuncts. Sperber and Wilson assume logical information not only in the case of logical concepts proper but also in the case of others regarded by logic as not logical (e.g., 'know', 'run' and 'bachelor'). Thus one can easily identify the elimination rules which express the logical properties of concepts with the meaning postulates proposed by Fodor et al. (1980).

The second type of information stored at a certain conceptual label is encyclopedic: it contains information about the extension and/or denotation of the concept, i.e., about the objects, events and/or properties which instantiate it. This type of information can be captured in terms of prototype theory or frame semantics.

Finally, at a conceptual label there is lexical information, which includes the phonological and syntactic properties of the natural-language counterpart of the concept.

Each of the above-mentioned three types of information is not necessary to characterize each concept, one or another of them may be lacking for certain concepts. For example, proper names can be seen as having no logical information, and the concept 'and' as lacking encyclopedic information. And there may be concepts which are not lexicalized and which therefore have no lexical information. Furthermore, beside lack of logical information and having logical information which amounts to a proper definition of the concept, Sperber and Wilson's (1995, 92) framework allows for cases providing some logical specification of the concept without fully defining it. The latter is true, for instance, for natural kind terms. Further, in their more recent work Sperber and Wilson (1998, 185) state that many words such as *my*, *long* etc. do not seem to encode a full-fledged concept. So, underspecificity can be found not only at the level of logical form but also at the level of its constituents, i.e., concepts. This underspecificity always induces inferential processes during the interpretation of utterances. (Cf. also Wilson-Sperber 2002, 623.)

4.2. Possibility of word meaning decomposition in lexical pragmatics

As is evident from the above discussion, RT substantially differs from TCS and GLT in respect to the representation of concepts and, conse-

quently, to meanings of words expressing them. According to RT, concepts providing the meaning for non-procedural words are not decomposable, that is to say, they are whole units in this sense. At the same time, according to TCS and GLT, word meanings have internal structure, i.e., they are composed out of more primitive meaning components. In this subsection I will argue that decomposition is more suitable than the holistic view. To begin with, let us consider (32) and (33), which include the decomposed meaning representations, in traditional format, for the verbs *kill* and *give*, as well as (34) and (35), which show meaning postulates assigned to the same two verbs by a holistic view (cf. Jackendoff 1990, 39).

(32) CAUSE (x , BECOME (y , not ALIVE (y)))

(33) CAUSE (x , HAVE (y , z))

(34) x killed $y \rightarrow y$ died

(35) x gave z to $y \rightarrow y$ had/has z

One can easily realize that, in contrast with the contingency of entailments in (34) and (35), the events expressed by means of *die* and *have* obviously result from the internal structure of (32) and (33). Surely the meaning of *die* can be represented as BECOME (y , not ALIVE (y)) and that of *have* as HAVE (y , z). The meaning representations (32) and (33) indicate not only the relation between *kill* and *die* as well as *give* and *have* but also the possibility of generalizing between the members of causative–noncausative pairs. The following schema, where e = event, can be proposed:

(36) x causes e to occur $\rightarrow e$ occurs

In other words, the schema in (36) established through decomposition of verb meanings brings into connection the otherwise unrelated meaning postulates in (34) and (35). A conclusion can be drawn that the meaning postulate approach misses all generalizations across relational properties of lexical items (cf. Jackendoff 1990, 39).

Let us examine the two different meaning representations from another point of view. Now I start from the underspecific character of word meanings in terms of RT that words such as *my* and *long* encode no full-fledged concepts. Unlike Fodor et al. (1980), in this case one cannot expect that the meaning decomposition gives the necessary and at

the same time sufficient conditions of application of words. Although this statement weakens the criticism against decomposition, it is worth raising the question: how would RT or the meaning postulate approach handle polysemy if we wanted to apply an underspecified representation to capture the relation between various meanings rather than enumerating these meanings? Using the notion of complex type, in the case of *book* we could write the following entailment:

(37) $x.y$ is a book \rightarrow information.phys_obj_lcp

As has been argued in 3.2, the noun *book* also has other meanings, which can be expressed in terms of meaning postulates via (38) and (39):

(38) $x.y$ is a book $\rightarrow x.y$ is an activity

(39) y is a book $\rightarrow y$ is a type of information

Do (38) and (39) give account of the meanings ‘activity’ and ‘type of information’, respectively? Yes, of the meanings themselves. However, they do not express that these meanings are connected to those represented in (37). Furthermore, on the basis of (38) and (39) it is not clear that the meanings are generally characteristic of the *book*-type nouns, i.e., the words with ‘information’, ‘physical object’ and the complex type consisting of the former simple types.

The meaning postulate approach does not seem to be successful in capturing the information represented in (25) in subsection 3.3, either. Let us recall that each of the verbs in (12), (20)–(22) and (24) can be handled as a single lexical entry if the meanings in (a)- and (b)-examples are represented as one abstract meaning with optional parts (e.g., FIN), which are only relevant in the second context. In the opposite case the meaning postulates like the ones below would be needed:

(40) x úszik ‘float/swim’ / szalad ‘run’ / rohan ‘rush’ / pattog ‘bounce’ / forog ‘spin’
/ könyököl ‘lean on one’s elbows’ / guggol ‘crouch’ $\rightarrow x$ moves in some place

(41) x úszik ‘swim/float’ / szalad ‘run’ / rohan ‘rush’ / pattog ‘bounce’ / forog ‘spin’
/ könyököl ‘lean on one’s elbows’ / guggol ‘crouch’ $\rightarrow x$ moves to some place

However, (40) and (41) do not indicate the semantic relation between the members of verb pairs at all. If one tried to express the relation between ‘to some place’ and ‘in some place’ in terms of meaning postulates, the probable schema would tell no more than what clearly follows from the

corresponding formula composed out of meaning components, i.e., $[(\text{FIN}) [\text{LOC } x] \alpha [\text{LOC } u]]$.¹⁹

As has been claimed above, meaning decomposition is not a method that guarantees the necessary and, at the same time, sufficient conditions of application of words. Consequently, it cannot be considered the only way of the meaning representation. Instead, prototype theory, which was mentioned in connection with the conceptual differentiation of TCS and the encyclopedic information stored at conceptual addresses in RT, plays a significant role, as well. Surely, independently of whether words encode full-fledged concepts, prototype semantics provides characteristics of a heuristic, mainly perceptual and functional kind which structurally determine cognitive processes such as picking out instances of concepts. This way we arrive at a conception of meaning representation according to which the meaning structure of lexemes is not uniform but consists of constituents accessible by means of various methods of analysis. In addition, different words include various constituents to a different degree. Besides, we have to take into account that logical words (*and*, *or*, *not*, *all* etc.) and lexical items with procedural meaning are to be handled in different ways, i.e., not in terms of semantic decomposition and/or prototype theory.²⁰

4.3. Immediate and extended contexts in lexical pragmatics

The role of contexts in utterance interpretation in the view of lexical pragmatics amounts to much more than choosing a meaning from a set fixed in an underspecified representation. Before dealing with the details of this issue, I want to point out that, following Bibok–Németh T. (2001), by *immediate context* I mean the remaining part of the utterance under investigation in the subsequent sections of the present paper. Such a treatment of the immediate context seems to be in order not only in absence of an utterance immediately preceding the utterance under investigation but also because certain constituents of the utterance, a word

¹⁹ In contrast to Fodor et al. (1980), psycholinguistic investigations by Gergely and Bever (1986) show that relatedness intuitions cannot be used as a critical test of the relative complexity of syntactic and semantic representations of predicates. For further arguments against the meaning postulate approach, see Bierwisch (1997, 232–3); Jackendoff (1990, 40–1).

²⁰ For a typology of words based on the various kinds of representation of their meaning, see Bibok (2000).

of which one wants to understand, can serve as a context to get its pragmatically enriched meaning. In addition, since the conceptual meaning of words is represented in terms of decomposition and/or prototype theory, semantic information from these internal structures, including encyclopedic information provided by prototype, is directly given in the immediate context. Below I will show that the immediate context, understood in this way, plays a crucial role in lexical pragmatics, unlike in RT but in accordance with TCS and GLT.

As for *extended context*, it refers to extending the immediate context, defined as above. Lexical pragmatics regards as an extended context an utterance immediately preceding the utterance under investigation, unlike RT, which only takes an utterance occurring earlier in the exchange as a case of extending contexts. This divergence from RT does not create a conceptual problem because RT itself allows for multiple extending of contexts. Further, according to lexical pragmatics, contexts can be extended by the help of information from the immediately observable environment (as in RT) and through encyclopedic information, not captured in prototype structures, e.g., world knowledge about denotations of proper names, which appear both in immediate contexts and previous utterances.

As has been said in connection with (18b), the noun *fordító* ‘translator’ overrides the information in both the TELIC and AGENTIVE roles of *book/könyv*. In terms of RT it can be made explicit as follows: if in the position of syntactic subject of an utterance there is a noun which refers to a person’s profession, the hearer may infer another event connected to *book/könyv*. On the basis of this immediate context—for lack of further contextual specificity—he/she gets the following relevant interpretation: ‘The translator began/continued/finished translating the book.’ Contrary to a default utterance such as *Mária elkezdte/folytatta/befejezte a könyvet* ‘Mária began/continued/finished the book’ (= 11a), the interpretation of an utterance with the noun *fordító* ‘translator’ (= 18b) needs more cognitive effort, which, in turn, is recovered with the more specific contextual effects yielded by the processing (18b).

In a case when neither the noun in the position of syntactic object nor the immediate context, i.e., the noun in the position of syntactic subject, result in a relevant interpretation, the hearer has to apply context extension to it. Let us consider (42):

- (42) Péter elkezdte/folytatta/befejezte a könyvet.
 Péter.nom began/continued/finished.def.3sg the book.acc
 'Péter began/continued/finished the book.'

The noun itself occurring in the syntactic subject position of (42) does not provide enough information for a relevant interpretation. However, if one extends the context by means of the encyclopedic information concerning the Péter's profession, one may get the relevant interpretation. For example, if it is known that Péter is a translator by profession, (42) probably means that he began/continued/finished to translate the book. Furthermore, according to RT, contexts can also be extended by means of the discourse context or immediately observable physical environment. So, if the relevant "world" is constructed in the context of a discourse or we can see a little boy who has torn up a book, (42) can refer to an event such as Péter began/continued/finished to tear the book to pieces.

To sum up, as to how to interpret the verbs *elkezd* 'begin', *folytat* 'continue', *befejez* 'finish', I can generally state the following. With these and similar verbs, the lexically unrealized (implicit) predicate is identified in three ways: (a) if lexical-semantic representations of nouns in syntactic object position provide the events for relevant interpretation; if (b) the rest of the utterance or (c) an extended context give grounds for a pragmatically acceptable assumption.

The same interpretation mechanisms are suitable for implicit arguments (Németh T. 2001). For example, the unrealized object of the verb *eszik* 'eat' can be identified not only in the way illustrated in connection with (27), i.e., by means of extending the context but also via the lexical-semantic representation of that verb or its immediate context. Let us assume that, independently of the lexical realization, the verb *eszik* 'eat' always has two arguments on the semantic level because the activity denoted by that verb is logically inconceivable without a second argument. Furthermore, its lexical-semantic representation contains a selectional restriction put on the second argument: it has to be of the type *food*. Consider (43) answering the question *Mit csinál Péter?* 'What is Péter doing?'

- (43) Péter eszik.
 Péter.nom eats.indef
 'Péter is eating.'

A hearer can try to interpret (43) without any specific context. In decoding the verb *eszik* 'eat', he/she arrives at more specific information than 'eat something', figuring in logical form (28) (cf. Wilson–Sperber 2002). It is enough for him/her to rely on the selectional restriction of that verb to get a relevant interpretation: 'Péter is eating something that can be eaten (i.e., food).'

Now consider (44) answering the question *Mit csinál a felesége?* 'What is his wife doing?'

- (44) A felesége fogta a tányért és a kanalat, és eszik.
 the wife.poss.nom took.def.3sg the bowl.acc and the spoon.acc and eats.indef
 'His wife took the bowl and spoon and is eating.'

Let us try to interpret (44) without any specific context, external to that utterance. In (44) the lexical-semantic representation of the verb *eszik* 'eat' including the appropriate selection restriction alone does not yield a relevant interpretation. We have to take into account the rest of the utterance, i.e., the immediate context to identify the lexically unexpressed direct object argument. The encyclopedic information stored with lexical items of the utterance makes accessible an assumption like the following: Adult people typically eat liquid food, e.g., soup or a vegetable stew, out of a bowl and with a spoon. Naturally, a little child may eat other food with a spoon, but this reading cannot come into one's mind without specific indication because, according to our encyclopedic knowledge, the lexeme *feleség* 'wife' typically denotes an adult human being. Hence the relevant interpretation of (44) may be that 'his wife took the bowl and spoon and she is eating soup, a vegetable stew or something similar out of the bowl with a spoon'.

Utterance meanings yielded through co-composition or conceptual selection can also be derived by means of the three interpretation mechanisms shown in cases of implicit predicates and arguments. First, underspecified predicates are influenced by lexically encoded meanings of arguments: the verbs *úszik* 'float/swim', *szalad* 'run', *rohan* 'rush', *pattog* 'bounce', *forog* 'spin', *könyököl* 'lean on one's elbows' and *guggol* 'crouch' by nouns with local or directional inflexions and postpositions (cf. (12), (20)–(22), (24)) as well as the verb *kilép* 'leave' by the nouns *egyház* 'church = institution' or *templom* 'church = building' (cf. (26)). Second, immediate contexts provide the relevant information to infer meanings of verb phrases. For example: the time adverbials *1975-ben* 'in 1975' and *dél előtt tíz órakor* 'at ten o'clock in the morning' in (1). Third, extended

contexts make accessible inferences which lead to pragmatically acceptable assumptions. This is the case with utterances whose interpretation is not supported by time adverbials:

- (45) Péter elment az iskolából.
 Péter.nom left.indef.3sg the school.ela
 'Péter left school.'

Co-composition and conceptual selection can be conceived of as interpretation mechanisms which do not only give the meanings of linguistic constructions (via amalgamation plus inference) but also help to infer meanings of their constituents (of which, then, meanings of constructions are composed). Let us take the first case. Meanings of underspecified predicates in utterances can be concretized on the basis of information encoded linguistically in contexts. This proceeds similarly to the disambiguation of lexically and grammatically ambiguous expressions through inferential processes in RT. Nonetheless, there is a substantial difference. With our examples we choose either of the meanings not from a list of meanings but from underspecified lexical-semantic representations ('move in some manner' and 'move in some manner to somewhere') as well as from meanings accessible on the conceptual level ('physical motion' and 'change in social status'). As to the above-mentioned second and third cases, meanings of the constituents *elmegy* 'leave' and *iskola* 'school' of a phrase in (45) are inferred on the basis of extended contexts which supply world knowledge. Even if such time adverbials as *1975-ben* 'in 1975' or *délelőtt tíz órakor* 'at ten o'clock in the morning' appear in an utterance (cf., e.g., (1a) or (1b)), there is no doubt that they specify the meanings of *iskola* 'school' and—by virtue of that specification—those of *elmegy* 'leave' inferentially but not by means of linguistic information encoded by themselves.

4.4. Interpretation mechanisms and relevance

In Bibok-Németh T. (2001) it is argued that a single general rational principle, the Cognitive Principle of Relevance, discussed in 4.1, regulates the three ways in which one construes the meaning of utterances with implicit arguments and predicates as well as the utterance meaning

emerging through co-composition or conceptual selection.²¹ Furthermore, the hierarchy of three interpretation mechanisms is regulated by the same principle, too (Bibok–Németh T. 2001). To avoid unnecessary processing efforts resulting in no suitable contextual effects, the adequate interpretation can be formed—for lack of any specific context—by the help of a lexical-semantic representation of the lexemes in question. If this does not lead to a relevant interpretation, then, for lack of any specific context outside the utterance under procedure, the immediate context should be taken into consideration. If this does not yield the pragmatically acceptable interpretation either, one should extend the context, making more processing efforts. In other words, the interpretation proceeds from less to more processing effort, i.e., from taking into consideration lexical-semantic representations to extending contexts. The interaction between lexical-semantic information and context of sufficient quantity indicates the functioning of the Cognitive Principle of Relevance.

In view of the hierarchy of interpretation procedures, it has to be stressed once more that, in the proposal I have just outlined, the indication of lack of special contexts plays a crucial role in the functioning of gradual interpretation. If the context is more specific from the beginning, it determines the utterance meaning to a higher degree. At the same time, this claim does not contradict what has been said in connection with TCS in section 2: because of non-neutral contexts, representing metaphorical meanings requires the deletion or re-interpretation of previously established meaning components. If this does not necessarily hold for processing utterances, it is true for the representations corresponding the various kinds of meanings of linguistic expressions. Similarly, the distinction between primary and non-primary literal meanings, introduced also in section 2, indicates the relation existing on the level of representations since it is not necessarily the case that all the primary meanings have to be processed to derive one non-primary meaning.

5. Conclusion

In the present paper I have outlined a conception of lexical pragmatics which critically amalgamates the views of Two-level Conceptual Semantics, Generative Lexicon Theory and Relevance Theory concerning word

²¹ In all these cases one may think of the construction of explicit utterance meaning, i.e., that of explicatures.

meanings in utterances. As I have demonstrated in detail, lexical pragmatics has **more explanatory power** than each theory does separately. It has the following **main theses**.

Lexical pragmatics accepts—as a starting-point of the construction of word meanings in utterances—lexical-semantic representations which can be radically underspecified and allow for other methods of meaning description than componential analysis. All three theories investigated in order to elaborate on lexical pragmatics agree that a number of words do not encode full-fledged concepts. If, according to the argumentation in 4.2, word meanings are not treated as wholes, then, for the manifestation of underspecificity, one uses the forms of representations put forward by TCS and GLT in favour of the systematic and economical handling of lexical units. Furthermore, in contextual interpretation, lexical pragmatics applies lexical-semantic representations in which, beside decomposition, a significant role is given to prototype semantics mentioned in connection with both TCS and RT. Not only are meaning structures of words non-uniform but also various methods of meaning description are necessary for various words. For example, componential analysis and prototype theory cannot be applied to logical words (*and, or, not, all* etc.) or to words having procedural meanings such as personal pronouns, pragmatic connectives and particles.

According to RT, the logical form yielded by decoding is to be enriched to get the proposition expressed by an utterance. Lexical pragmatics is of the opinion that as words have underspecified meaning representations, they also reach their full meanings in corresponding contexts through considerable pragmatic inference. Likewise, the contexts may help to find lexically required arguments and predicates which are, however, unrealized in utterances.

Inspired by RT, lexical pragmatics distinguishes between immediate and extended contexts. However, as has been pointed out in 4.3, in lexical pragmatics they are meant as contexts inside and outside utterances, respectively, that words under interpretation can have.

Lexical pragmatics claims that there is a manner of utterance meaning construction which operates only on the basis of lexical-semantic representations. Hence, with respect to type coercion, co-composition and conceptual selection, the utterance meaning can be construed in three different ways: by means of lexical-semantic representations, immediate and extended contexts.

Furthermore, in the view of lexical pragmatics, the Cognitive Principle of Relevance regulates the construction of utterance meaning in one of three ways, the hierarchy of which is also influenced by the same principle. As has been claimed in 4.4, interpretation proceeds from less to more processing effort, i.e., from taking into consideration lexical-semantic representations to extending contexts.

Finally, I hope that the proposed concept of lexical pragmatics will bring more results if it is applied to further empirical data and compared with other models of lexical pragmatics or words-in-use (Blutner 1998; Weigand 1998). The latter task would be extremely intriguing. Criticizing TCS and GLT, Blutner proposes an underspecification approach with a mechanism of contextual enrichment based on a neo-Gricean re-treatment of conversational implicatures. Contrary to a formalized theory of lexical pragmatics, the preferred framework in Weigand (1998) is one that deals with natural, i.e., authentic, language use and for that the starting-point is words-in-use. However, a comprehensive comparison of how I conceive of lexical pragmatics with other strands is a task for future research.

References

- Bárczi, Géza – László Országh (eds) 1959–1962. A magyar nyelv értelmező szótára [A defining dictionary of the Hungarian language] I–VII. Akadémiai Kiadó, Budapest.
- Bibok, Károly 1998. A *hív* és a *küld* igék konceptuális szemantikai vizsgálata [A conceptual semantic investigation of the Hungarian verbs *hív* 'call' and *küld* 'send']. In: Magyar Nyelv 94: 436–46.
- Bibok, Károly 1999. A *könyv*-típusú szavak poliszémiája [Polysemy of the words of type *könyv* 'book']. In: Tamás Gecső (ed.): Poliszémia, homonímia [Polysemy, homonymy], 24–30. Tinta Könyvkiadó, Budapest.
- Bibok, Károly 2000. Conceptual semantic investigations in Russian and Hungarian. In: Endre Lendvai (ed.): Applied Russian studies in Hungary, 15–32. Krónika Kiadó, Pécs.
- Bibok, Károly 2002. *Vág*: egy elemzés a konceptuális differenciáció területén [*Vág* 'cut': an analysis in the field of conceptual differentiation]. In: Károly Bibok – István Ferincz – Mihály Kocsis (eds): Cirill és Metód példáját követve...: Tanulmányok H. Tóth Imre 70. születésnapjára [Following Cyril and Methodius's example: Festschrift for Imre H. Tóth on the occasion of his 70th birthday], 57–66. JATEPress, Szeged.
- Bibok, Károly – Enikő Németh T. 2001. How the lexicon and context interact in the meaning construction of utterances. In: Németh T. – Bibok (2001b, 289–320).

- Bierwisch, Manfred 1979. Wörtliche Bedeutung und eine pragmatische Gretchenfrage. In: Günther Grewendorf (ed.): *Sprechakttheorie und Semantik*, 119–48. Suhrkamp, Frankfurt/M.
- Bierwisch, Manfred 1983a. Formal and lexical semantics. In: Manfred Bierwisch: *Essays in the psychology of language* (*Linguistische Studien A 114*), 61–99. ZISW, Berlin.
- Bierwisch, Manfred 1983b. Semantische und konzeptuelle Repräsentation lexikalischer Einheiten. In: Rudolf Růžička · Wolfgang Motsch (eds): *Untersuchungen zur Semantik* (*Studia grammatica 22*), 61–99. Akademie-Verlag, Berlin.
- Bierwisch, Manfred 1996. How much space gets into language? In: Paul Bloom – Mary A. Peterson – Lynn Nadel – Merrill F. Garrett (eds): *Language and space*, 31–76. MIT Press, Cambridge MA.
- Bierwisch, Manfred 1997. Lexical information from a minimalist point of view. In: Chris Wilder – Hans-Martin Gärtner · Manfred Bierwisch (eds): *The role of economy principles in linguistic theory* (*Studia grammatica 40*), 227–66. Akademie Verlag, Berlin.
- Blutner, Reinhard 1998. Lexical pragmatics. In: *Journal of Semantics* 15:115–62.
- Carston, Robyn 2002. *Thoughts and utterances: The pragmatics of explicit communication*. Blackwell, Cambridge MA & Oxford.
- Fodor, Jerry A. – Merrill F. Garrett – Edward C. T. Walker – Cornelia H. Parkes 1980. Against definitions. In: *Cognition* 8:263–367.
- Fodor, Jerry A. – Ernie Lepore 1998. The emptiness of the lexicon: Reflections on James Pustejovsky's *The Generative Lexicon*. In: *Linguistic Inquiry* 29:269–88.
- Gergely, György – Thomas G. Bever 1986. Related intuitions and the mental representation of causative verbs in adults and children. In: *Cognition* 23:211–77.
- Grice, H. Paul 1975. Logic and conversation. In: Peter Cole · Jerry L. Morgan (eds): *Syntax and semantics*, vol. 3: *Speech acts*, 41–58. Academic Press, New York.
- Grice, H. Paul 1978. Further notes on logic and conversation. In: Peter Cole (ed.): *Syntax and semantics*, vol. 9: *Pragmatics*, 113–28. Academic Press, New York.
- Jackendoff, Ray 1990. *Semantic structures*. MIT Press, Cambridge MA.
- Jackendoff, Ray 2002. *Foundations of language: Brain, meaning, grammar, evolution*. Oxford University Press, Oxford.
- Kiefer, Ferenc 1995. Cognitive linguistics: A new paradigm? In: *Linguistics in the Morning Calm* 3:93–111.
- Kiefer, Ferenc 2000. *Jelentélmélet [Semantic theory]*. Corvina, Budapest.
- Komlósy, András 1992. Régeisek és vonzatok [Valence and government]. In: Ferenc Kiefer (ed.): *Strukturális magyar nyelvtan 1. Mondattan [A structural grammar of Hungarian, vol. 1: Syntax]*, 299–527. Akadémiai Kiadó, Budapest.
- Komlósy, András 2000. A műveltetés [Causativization]. In: Ferenc Kiefer (ed.): *Strukturális magyar nyelvtan 3. Morfológia [A structural grammar of Hungarian, vol. 3: Morphology]*, 215–92. Akadémiai Kiadó, Budapest.
- Levinson, Stephen C. 2000. *Presumptive meanings: The theory of generalized conversational implicature*. MIT Press, Cambridge MA.
- Németh T., Enikő 2001. Implicit arguments in Hungarian: Manners of their occurrence and possibilities of their identification. In: István Kenesei (ed.): *Argument structure in Hungarian*, 113–56. Akadémiai Kiadó, Budapest.

- Németh T., Enikő 2004. The principles of communicative language use. In: *Acta Linguistica Hungarica* 51:379–418.
- Németh T., Enikő – Károly Bibok 2001a. Introduction: Towards the new linguistic discipline of lexical pragmatics. In: Németh T. – Bibok (2001b, 1–9).
- Németh T., Enikő – Károly Bibok (eds) 2001b. Pragmatics and the flexibility of word meaning (Current Research in the Semantics/Pragmatics Interface 8). Elsevier, Amsterdam.
- Pethő, Gergely 1998. A *száj* szó jelentésének kognitív szemantikai leírása [A cognitive semantic description of the meaning of the word *száj* 'mouth']. In: *Folia Uralica Debreceniensia* 5:133–202.
- Pustejovsky, James 1991. The syntax of event structure. In: *Cognition* 41:47–81.
- Pustejovsky, James 1995. *The Generative Lexicon*. MIT Press, Cambridge MA.
- Pustejovsky, James 1998. Generativity and explanation in semantics: A reply to Fodor and Lepore. In: *Linguistic Inquiry* 29:289–311.
- Pusztai, Ferenc (ed.) 2003. Magyar értelmező kéziszótár. 2. átdolgozott kiadás [A concise dictionary of definitions of Hungarian. 2nd, revised edition]. Akadémiai Kiadó, Budapest.
- Song, Nam Sun 1998. Metaphor and metonymy. In: Robyn Carston – Seiji Uchida (eds): *Relevance theory: Applications and implications*, 87–104. Benjamins, Amsterdam.
- Sperber, Dan – Deirdre Wilson 1995. *Relevance: communication and cognition*. Second edition. Blackwell, Cambridge MA & Oxford.
- Sperber, Dan – Deirdre Wilson 1998. The mapping between the mental and the public lexicon. In: Peter Carruthers – Jill Boucher (eds): *Language and thought: Interdisciplinary themes*, 184–200. Cambridge University Press, Cambridge.
- Taylor, John R. 1994. The two-level approach to meaning. In: *Linguistische Berichte* 149:3–26.
- Trón, Viktor 2002. Metonímia [Metonymy]. In: László Kálmán – Viktor Trón – Károly Varasdi (eds): *Lexikalista elméletek a nyelvészetben* [Lexicalist theories in linguistics], 291–312. Tinta Könyvkiadó, Budapest.
- Weigand, Edda (ed.) 1998. *Contrastive lexical semantics*. Amsterdam, Benjamins.
- Wierzbicka, Anna 1996. *Semantics: Primes and universals*. Oxford University Press, Oxford.
- Wilson, Deirdre – Dan Sperber 1993. Linguistic form and relevance. In: *Lingua* 90:1–25.
- Wilson, Deirdre – Dan Sperber 2002. Truthfulness and relevance. In: *Mind* 111:583–632.

Address of the author: Károly Bibok
 Department of Russian Philology
 University of Szeged
 Egyetem utca 2.
 H-6722 Szeged
 Hungary
 kbibok@lit.u-szeged.hu

THE ROLE OF SALIENCE IN PROCESSING PRAGMATIC UNITS

ISTVAN KECSKES

Abstract

The goal of the paper is twofold. Firstly, it explains the relevance of the Graded Salience Hypothesis (Giora 1997; 2003; Kecskés 2001) to pragmatics research, arguing that although this hypothesis is a psycholinguistic theory it may contribute significantly to our understanding of pragmatic processing. Secondly, it will be claimed and demonstrated through examples that the salient meaning of lexical units constituting utterances in conversation plays a more important role in comprehension than has been believed by the supporters of linguistic, sociolinguistic and pragmatic theories that consider context to be the main source of actual contextual meaning.

1. The Graded Salience Hypothesis

The Graded Salience Hypothesis (GSH) claims that in the initial phase of language comprehension, contextual and lexical processes do not interact but run parallel, and this stage is dominated by lexical access (Giora 1997; 2003). Salient meanings of lexical units are first accessed automatically and are then revised in the case of a misfit with context. Context becomes effective postlexically. Salient meanings of lexical units are determined by factors such as prior experience with the word or expression, familiarity, and frequency of encounters. As stated in the two goals of the paper given above, I will focus on two important claims of the GSH which are especially relevant to the processing of pragmatic units:

- (a) Salient meanings of lexical units are privileged meanings stored in the mind of individuals at a given time in a given speech community.
- (b) Context operates independently in the first phase of processing. It may be highly predictive, but it does not interact with lexical access and only becomes effective postlexically.

2. Privileged meaning

2.1. What is salience?

Geeraerts (2000) argued that systematic attention to salience phenomena is one of the major innovations of the cognitive approach which includes aspects of use in the description of lexical categories. It is emphasized that some senses are more salient than others because they are more readily chosen when using that category. Prototype theory showed “how the various semantic applications that exist within the boundaries of one particular category need not have the same structural weight within that category” (Geeraerts 2000, 79–80). Salience is where structure and use meet. In spite of this, salience is ignored in traditional lexical semantics which focuses on the description of various meanings of lexical items and structural relations among those meanings. Although the traditional approach gives a structured list of possibilities that language users may choose from in actual communication, the actual choices of the language users and the study of communication processes leading to those choices are completely ignored. In the cognitive approach salience directs attention to these important factors of human verbal interaction.

Salience is essential in the analysis of pragmatic units and pragmatic processing because it is usually seen as the structural reflection of pragmatic phenomena. This combination of semantic and pragmatic perspectives requires a slightly different understanding of the notion of ‘structure’ than is customary. Geeraerts (2000, 80) argued that “whereas linguistic structures would traditionally be seen merely as ordered sets of *possibilities*, adding pragmatic-based salience implies introducing *probabilities* rather than just possibilities.” This means that salience refers to the most probable out of all possible interpretations of a lexical unit. **The most salient meaning of a specific word, expression or utterance is the most conventional, frequent, familiar, or prototypical interpretation.** For instance: The most probable interpretation of the word *gay* is ‘homosexual’ rather than ‘merry’ or ‘lively’.

For pragmatic analysis, salience is important because words and larger lexical units such as idioms and situation-bound utterances usually have multiple meanings, and some of these meanings are more accessible than others because we ascribe greater cognitive priority in our mental lexicon to some meanings over the rest. This sounds reasonable. But why is this so? What determines whether a particular meaning of a lexical unit receives priority in the mental lexicon or not? What is the reason

the most salient meaning of the word *cool* is not ‘moderately cold’, which is given as the primary meaning (1) in the dictionary (Morris 1976, 292), but rather ‘excellent, first-rate’, which is given as meaning (8) marked as “slang”? Why is it that out of 30 native-speaker respondents all considered ‘easy’ as the most salient meaning of the expression *piece of cake* rather than the literal meaning of the lexical unit (Kecskés 2003, 130)? The answer to these questions seems relatively simple: because of prior experience and prior encounters with the word in relatively similar and typical contexts.

The fact that salience is based on prior experience has an especially important bearing on language processing of non-native speakers. Different experience results in different salience, and L2 acquisition differs significantly from L1 acquisition. Consequently, what is salient for individuals belonging to an L1 community will not necessarily be salient for the “newcomers”, the L2 learners. When acquiring another language, learners do two things. Firstly, they rely on prior knowledge which is the knowledge of the first language and the socio-cultural background that the L1 is based on. Secondly, they also give priority to certain meanings they encounter in the second language. However, the meaning which emerges as the most salient one in the case of a lexical unit in the L2 may differ significantly from what native speakers of the target language consider as the most salient meaning of that particular lexical or pragmatic unit. The next conversation illustrates this point:

- (1) (Aysa, a Turkish student is applying for a research assistantship. This is the end of her job interview:)

Professor: “Is there anything else you want to tell us about yourself?”

Aysa: “Uh, . . . no, nothing. . . When can I call for the result?”

Professor: “*There is no need to contact us. We’ll call you.*”

Aysa: “Ok, but, . . . uhm, . . . when?”

Professor: “Very soon.”

In this conversation the Turkish student has no idea that the professor’s words *There is no need to contact us. We’ll call you* actually mean refusal. Misunderstandings can only be comprehended fully by recourse to both parties’ cognition. In this case there is a clear discrepancy between what is salient for the professor and what is salient for the student.

This example shows us two things: firstly, that salience is based on prior knowledge and experience, and so it is a degree of familiarity, and

secondly, that salience is dynamic, and ready to change if use, environment, society, and speakers change.

2.2. What does salient meaning encode?

Giora (2003, 103) claimed that “privileged meanings, meanings foremost on our mind, affect comprehension and production primarily, regardless of context or literality.” What does salient meaning encode? How does it emerge as most privileged? Where does this “privilege” come from?

The most salient meaning(s) encodes (encode) standard context in which the given lexical item repeatedly occurs, on which we build our expectations about what may or may not happen, and on which our ability to understand and predict how the world around us works is based (cf. Violi 2000). The more encounters we have with this encoded meaning, the more familiar the situation(s) in which it occurs repeatedly may become. Factors such as frequency, familiarity, and prototypicality play a decisive role in shaping the “privileged” status of a particular **possible** meaning which may become the most **probable** one of all possible meanings of a lexical unit. The following example may shed some light on this phenomenon: I was supposed to have a meeting with one of my Ph.D. students who is a native speaker of English. She was late. When she entered my office, she said *Hello*, and gave the following explanation:

(2) Sorry. I was held up at a gas station. Not literally though.

This linguistic behavior of the student raises the question: Why did she find it important to add *Not literally though* after the use of the lexical unit *hold up*? Why did she think that I could misunderstand her? Was it because she knew I was a non-native speaker? Not really. I confronted her with these questions. She said that she did not want me to misunderstand her and think that there was actually a hold-up at the gas station. The student actually thought that the literal meaning of the verb *hold up* was ‘rob’ which is clearly the figurative meaning. According to The American Heritage Dictionary of the English Language (Morris 1976, 628), the lexical entry *hold up* has the following readings:

1. to prevent from falling; to support,
2. to present for exhibit; to show,
3. to last; to stand up; to endure,

4. to stop or interrupt; to delay,
5. to rob.

So why was this confusion in the mind of this native speaker of American English? It is likely that what happened was that she equated the most frequent and familiar meaning, i.e., the most salient meaning, with the literal meaning. Is this something that is unique to one speaker only, or is it a generalizable fact? It does seem to be. The traditional linguistic approach claims that in most people's mind it is the literal meaning from which all other meanings derive. The belief about the primacy of the literal meaning is so strongly conventionalized that not everyone notices when there is a shift in the semantic structure of a word, and what was once the most familiar, most frequent, and most conventionalized of all possible senses gives way to another sense which takes over as the most salient sense but not as the literal meaning. The important thing is that from the perspective of the GSH it is absolutely irrelevant whether the most salient sense is the literal meaning or the figurative meaning of the lexical unit. The most salient meaning can be either literal or figurative. What is important in our example is that there was a shift in lexical representation which has not led to a shift in conceptual representation. This fact also confirms the need to differentiate between lexical semantics and conceptual semantics. The literal-figurative dichotomy makes sense for language analysis, but not for language processing, where it cannot be claimed that literal is always processed before figurative.

2.3. Conventionality and culture-specificity of salience

Salience is not something that is exactly the same for each member of a language community, but it certainly is the same for the majority. Some native speakers of English may argue that when they ask someone *How are you doing?* it is not a semantically empty expression for them because they mean what they say. Moreover, one and the same person can use this expression in its literal or figurative sense depending on the situation or individual communicative need. This may be true in the case of certain people and certain situations, but it can hardly be denied that this expression usually functions like a greeting or a conversation-opener, or just as a sign that the speaker noticed the recipient. Why is that so? Because this expression primarily encodes a standard context which is associated with its most frequent and familiar use. Nunberg

et al. (1994, 492) view conventionality as “a relation among a linguistic regularity, a situation of use, and a population that has implicitly agreed to conform to that regularity in that situation out of preference for general uniformity, rather than because there is some obvious and compelling reason to conform to that regularity instead of some other.”

Conventionalization is a culture-specific phenomenon. What functions are conventionalized and how these functions are lexicalized is culture-dependent. This is why something that sounds good in one language may sound odd in another. Hungarian Americans often try to use a Hungarian equivalent of an American English expression:

(3) A: Kérsz még egy kis bort? ‘Would you like some more wine?’

B: Nem, köszönöm, jól vagyok. ‘No, thank you, I am fine.’

It sounds awkward to use *jól vagyok* as an equivalent of *I am fine* in this situation.

Kecskés (2000; 2003) argued that lexicalization of a similar conventional event in different languages is motivated and culture-specific. There is a cognitive reason why one expression and not another denotes a situational event in this or that culture, or why one culture finds it important to use an expression in a given situation while the other ignores that. For instance, *please help yourself* is often used by Americans at the table to urge their guests to start to eat or take some more food. The original cognitive mechanism responsible for the situational meaning of the expression could be described as follows: Take as much as you wish. I don’t want to help you because you know how much you need → so help yourself to as much as you need. This culture-specific pragmatic property of expression is no longer maintained consciously. So no inferential reasoning is necessary to find out that the speaker asks you to help yourself not because he does not want to help you but because he thinks that you yourself know exactly how much you want to eat. The linguistic form has acquired a pragmatically motivated sense which became conventionalized.

3. Salience and context

3.1. The psycholinguistic view

The most important contribution of the GSH to our understanding of language comprehension and production is the explanation of the interplay of encoded meaning and contextual information in shaping actual communicative meaning. This has always been one of the major issues of language processing research. The idea of the priority of context and selective compliance with contextual information has dominated theoretical and applied linguistics, sociolinguistics, pragmatics, and language teaching research for decades. This interactionist, direct access view (e.g., MacWhinney 1987) assumes that a strong context governs language processing and thus significantly affects lexical processes very early on. There is only a single mechanism that is sensitive to both linguistic and non-linguistic information. Comprehension does not involve a contextually incompatible stage at all. Context activates the contextually appropriate interpretation only. Because the direct access approach presupposes that contextual information interacts with lexical processes upon encounter, the first step—the one that taps the contextually appropriate meaning directly—is the only step (Giora 2003, 63).

An alternative to the direct access view is the modular view (e.g., Fodor 1983) which assumes that there are two distinct mechanisms: one bottom-up, sensitive to linguistic information and another, top-down, sensitive to contextual knowledge (both linguistic and extralinguistic). During processing all meanings of a word are activated upon encounter, regardless of contextual information. At times, the output of the linguistic module would cohere with contextual information; on other occasions, however, it would not and would require further inferential processes. So adjustment to contextual information happens later on and results in selecting the appropriate meaning while suppressing the contextually inappropriate meanings.

The GSH, which is considered a third alternative, claims, like the modular view, that there are two distinct mechanisms running parallel: an exhaustive but salience-sensitive mechanism that is receptive to linguistic information but impervious to context effects, and a predictive, integrative mechanism that is sensitive to linguistic and non-linguistic contextual information and interacts with lexical outputs. However, unlike the modular view (according to which all possible meanings are activated first, then “the lexicon proposes and context disposes” (see Bates

1999), the GSH assumes that the modular, lexical access mechanism is ordered: More salient meanings—encoded meanings foremost on our mind due to conventionality, familiarity, frequency or prototypicality—are accessed faster than and reach sufficient levels of activation before less salient ones. And the context does not always dispose, depending on the role of the so-called irrelevant meanings in shaping the final interpretation (Giora 2003). Gibbs (1994, 89–90) found that intended meaning of conventional utterances (idioms and indirect requests) has been processed without any analysis of the sentence's literal meaning. In Giora's interpretation, these findings demonstrate the effect of meaning salience rather than attest to context effects because the most salient meaning of idioms and conventionalized indirect requests (for instance: *Why don't you sit down?*) is their figurative meaning rather than their literal meaning.

Giora (2003, 11) gives a convincing example to show the interplay of lexical salience and context. In a discourse about computers the computer appliance meaning of the word *mouse* would be expected to be the first to occur to the participants. This demonstrates that a highly predictive context may make meanings available on its own accord very early on. Giora, however, argues that context would not penetrate lexical access. Although it has a predictive role that may speed up derivation of appropriate meaning, the context would not obstruct inappropriate, coded meanings upon encounter with the lexical stimulus. So a novice learning how to use computer software may activate the literal meaning of *mouse* since to him/her that sense is more accessible than the appropriate one.

3.2. The sociolinguistic view

How does salience relate to the internal interpretation of context and the cognitive theory of cultural meaning (Strauss–Quinn 1997; Gee 1999)? According to the latter, words and pragmatic units can create their own contexts because they represent cultural models, standard contexts that have psychological reality for the socio-cultural group which considers them as reflections of reality. This derives from the unique reciprocity between language and reality. Language does two things simultaneously: it reflects reality (the way things are), and constructs reality to be a certain way. Gee (1999, 82) argued that *reciprocity* is a good term to describe this property of language but *reflexivity* is a more commonly used term because language and context are like two mirrors which face

each other and “constantly and endlessly reflect their own images back and forth between each other.”

The GSH gives psycholinguistic support to the sociolinguistic “movement” that started with Gumperz (1982), who said that utterances somehow carry with them their own context or project the context. Referring to Gumperz’s work, Levinson (2003) argued that the message versus context opposition is false because the message can carry with it or forecast the context. Researchers, however, seem to hang on to the opposition because they focus on the foreground or message content, and it is the background that tends to project the context. Analyzing the relationship of situation-bound utterances (cf. Fónagy 1982; Kiefer 1996; Kecskés 2000) and context, Kecskés (2003; 2004) concluded that the actual contextual meaning is the result of an interaction between the activated world knowledge represented by the actual context and prior world experience (standard contexts) encoded in the pragmatic units the speakers have chosen to use. This unique, two-way and dynamic relation of present and past contexts makes discourse as vivid and expressive as it is. It also confirms what Gumperz (1982; 1992) has claimed: Social situations partially determine the choice of code, and yet that code-choice can partially determine situations.

Gumperz speaks about utterances, and the GSH focuses on lexical units: words and expressions. This, however, does not change the fact that there are no meanings that are context-free because each lexical item or pragmatic unit is always implicitly indexed to a standard context of reference. **Lexical and pragmatic units code the history of their prior contextual use.** So it can be argued that there are two types of contexts: one that is encapsulated in the lexical units as the result of prior and partly or fully conventionalized use, and another that is actual context and is activated in the process of verbal interaction (Kecskés 2003; 2004). Salient meaning emerges as the most conventional, familiar, and frequent out of this prior use. Actual context comes in as a regulator when there is discrepancy between the coded standard context and the actual context. In this regulatory process it is the actual context that has the final word.

3.3. Hierarchy of utterance interpretation

As a result of the latest psycholinguistic research, a view which considers utterance interpretation hierarchical has emerged. According to this, utterance interpretation starts with the lexical meaning of the word or

pragmatic unit. If it does not lead to the relevant interpretation, then the immediate context comes into play. If this does not result in a pragmatically appropriate interpretation either, the context should be extended (cf. Giora 1997; Bierwisch 1997; Bibok–Németh T. 2001). The hierarchy of interpretation looks like this:

- (4) Lexical interpretation → Immediate context → Extended context

This approach is in accordance with the two-level semantic (lexical semantics vs. conceptual semantics) theory (cf. Bierwisch 1997; Bibok 2000 and the relevance theory of Sperber–Wilson 1995).

Several researchers have come to support this hierarchy of utterance interpretation although they took different paths. While Giora (1997; 2003) called this interpretation the “Graded Salience Hypothesis”, Bibok and Németh T. (2001) took a different route via the principle of relevance which states that “human cognition tends to be geared to the maximization of relevance” (Sperber–Wilson 1995, 260). This means that in communication we want to achieve more cognitive effects with less processing effort (cf. Wray 2002). Consequently, processing should start with the most obvious and/or most salient meaning of lexical units making up the utterance. However, this meaning is either relevant to the given context or not. So relevance and salience are not the same, although sometimes what is salient is also relevant.

Supporters of the two-level semantic theory, relevance theory and GSH approach all agree with the hierarchy of interpretation which basically supports a modular view. The difference is in their approach to the question of what meaning(s) of a lexical unit is (are) activated in the first phase of processing and what the role of context is in this phase:

Classic modular view: All meanings are activated and context selects the right one at a post-access stage. Examining the contextual behavior of ambiguous words, Gibbs (1996) came to the conclusion that people momentarily activate all the meanings of an ambiguous word, with context then working to clarify its meaning. Context becomes operative only at a post-access stage, guiding the selection of the contextually relevant meaning of the ambiguous word.

Modified modular view of two-level semanticists: According to the followers of two-level semantic theory (cf. Bierwisch 1997; Bibok–Németh T. 2001) underspecified word meanings are activated in the first phase of interpretation. This approach claims that lexical units get into the context underspecified. It is argued that the specification of word meaning in

context is achieved by conceptual shift. In other words, interpretations mean mapping underspecified semantic meanings onto fully determined conceptual meanings on the basis of our world knowledge.

The relevance theory approach: According to relevance theory, the linguistically encoded meaning acts as no more than a starting point for inferring the speaker's meaning (Sperber–Wilson 1995). Linguistic decoding (bottom-up process) needs the selection of appropriate contextual assumptions (top-down process) that assist the inferential process. Although Sperber and Wilson (1995) do not say this directly, they also refer to some kind of underspecified meaning in the first phase of comprehension because word meaning for them is only “a starting point” of the inferential process and becomes specific only in context.

The GSH differs from each of these three approaches in that it maintains that the most salient meaning(s) is (are) activated in the first phase of processing, and the activation process is graded with the most salient meaning coming first. It is important to repeat here the most important claim of the GSH: **In the first phase of processing lexical and contextual processing run parallel but do not interact, and context becomes decisive only in the second phase of processing.** Based on this claim it can hardly be maintained that word meaning is underspecified in the first phase of processing. Lexical meaning and contextual meaning are “equal partners” from the starting point of the comprehension process. They both represent world knowledge, but a different kind. Kecskés (2004) argued that world knowledge is available to interlocutors in two forms: encapsulated in lexical items based on prior encounters and experience (occurrence in prior contexts), and in the actual linguistic and extralinguistic context framed by the given situation. Meaning is the result of the interaction of the two sides of world knowledge. When language is used we both create context and situations (make things meaningful in certain ways and not others) and fit, adjust and adapt our language to these ongoing contexts and situations (e.g., Gumperz 1982; Gee 1999).

3.4. Types of processing in the GSH and their pragmatic relevance

The GSH claims that different linguistic expressions (salient–less salient) may tap different (direct/parallel/sequential) processes. **Direct processing** applies when highly salient meanings are intended. When, for instance, the most salient meaning is intended (e.g., the figurative meaning of conventional idioms, or the special communicative function of

situation-bound utterances), it is accessed directly, without having to process the less salient (literal) meaning first (Gibbs 1980; Giora 1997). We can take the figurative meaning of a conventional idiom as an example:

(5) Jim: "Joe, can you fix my car?"

Joe: "*Piece of cake.*"

If *piece of cake* is processed literally, it does not fit into the context. However, we do not look at the context first, rather we opt for the more accessible information. This situation also suggests that context affects comprehension after highly salient information has been accessed. If it is compatible with the context, no further effort is needed as the principle of relevance requires and the GSH claims. If, however, there is no match, the search for possible alternatives continues.

Parallel processing is induced when more than one meaning is salient. Conventional metaphors whose metaphoric and literal meanings are equally salient are initially processed both literally and metaphorically (Blasko–Connie 1993). According to the GSH, top-down contextual processes can be predictive and affect the availability of meanings very early on. However, these guessing, inferential processes do not interact with lexical processes but run parallel (Giora 2003, 22). Context plays a critical role in the first phase of processing in cases when a lexical unit does not have a dominant salient meaning so it may have more than one very frequent, stereotypical, familiar, and equally conventionalized meaning as in the following situations. The expression *What's wrong with you?* has two almost equally salient meanings:

(6) Sam: "Coming for a drink?"

Andy: "Sorry, I can't. *My doctor* won't let me."

Sam: "*What's wrong with you?*" (Maley 1980, 10)

In this situation the pragmatic unit *What's wrong with you?* is an inquiry about the health condition of Andy. This sense is triggered by the contextual cue *my doctor* which precedes the pragmatic unit. If, however, we change this contextual cue to *my mother-in-law*, the meaning of *What's wrong with you?* will change with it in the following way:

(7) Sam: "Coming for a drink?"

Andy: "Sorry, I can't. *My mother-in-law* won't let me."

Sam: "*What's wrong with you?*"

Here, the pre-text activates the appropriate sense of *What's wrong with you?* As said above, prior context can affect the accessibility of the meaning of a word or an expression. A prior occurrence of a word (*mother-in-law*) which is semantically or pragmatically (as in the example) related to a following word or expression (*What's wrong with you?*) may ease the processing of that word or expression: the selection of the context-appropriate sense out of the more than one possible salient senses. Concretely, the word *mother-in-law* triggers the other salient meaning of the expression which means something like 'Are you insane?'

When a less rather than a more salient meaning is intended (e.g., the metaphorical meaning of novel metaphors, the literal meaning of conventional idioms, a novel interpretation of a highly conventional literal expression, or the literal meaning of a conventional situation-bound utterance) comprehension seems to involve a **sequential process**, in which the more salient meaning is processed initially, before the intended meaning is derived (Blasko–Connine 1993; Gibbs 1996). This can be illustrated with the following conversation:

(8) (John has fallen into a hole and talks to his friend:)

John: "Bob, get me out of this hole, will you? *Give me a hand.*"

Bob: "OK, I am calling the firemen."

John: "Don't... just give me your hand."

The expression *Give me a hand* has its figurative meaning 'help' as the most salient. At the same time it can be used in its literal sense as well. The conversation shows that the misunderstanding happened because Bob processed the figurative rather than the literal meaning first. This can be explained by the fact that in the given situation both interpretations appeared to be relevant.

4. Conclusion

No matter from what perspective we are looking at language processing, the unique interplay of prior and actual knowledge reflected in the lexical units and context needs to get special attention. The GSH helps us reveal the mechanisms responsible for this interaction. The main claim of the hypothesis is that salient meanings are processed automatically (though not necessarily solely), irrespective of contextual information and strength of bias in the first phase of comprehension when lexical

processing and contextual processing run parallel (Giora 2003, 24). This assumes that while context can be predictive of certain meanings, it is deemed ineffective in obstructing initial access of salient information.

It was demonstrated that the GSH can contribute significantly to our understanding of pragmatic processing. In this study priority was given to issues concerning the interpretation of the role of lexical meaning and context in the process of comprehension. The GSH calls our attention to three important facts about context:

It is reasonable to talk about two types of context: prior conventionalized context encoded in the lexical units and actual situational context with its linguistic and extralinguistic elements. It was argued that the particular power of salience derives from the process of interaction between prior contexts (represented in lexical units) and actual contexts that result in what we call “what is communicated”.

Context is a regulator rather than a selector. Since not all possible meanings of a lexical unit are activated during language processing, there is nothing for context to select. However, when the most probable meaning is activated, context needs to rule whether that is the relevant meaning or not.

Although salience goes together with a certain kind of rigidity, it is not negative at all. Rigidity and search for novelty are equally present on our mind. Erman and Warren (2001) argued that about half of our written (52.3%) and spoken (58.6%) language consists of routines—prefabricated expressions whose meanings and forms have been conventionalized and lexicalized. These formulaic units usually have a salient meaning which creates the same or similar context for most speakers of that language community. However, salience and novelty are not enemies, in fact they are intertwined and feed on each other. Novelty often means change in salience rather than invention of something entirely new. On the one hand language relies on bleaching, on the other it looks for protection against it. The constant pursuit of novel experiences can be considered a reaction against the process of bleaching, of becoming salient, which is the result of repetitive exposure. Giora (2003, 35) says that how salience shifts is still a mystery. Not really. We at least know where to seek an explanation.

References

- Albertazzi, Liliana (ed.) 2000. *Meaning and cognition: A multidisciplinary approach*. John Benjamins, Amsterdam.
- Bates, Elizabeth 1999. On the nature and nurture of language. In: E. Bizzi – P. Calisano – V. Volterra (eds): *Frontiere della biologia: Il cervello di Homo sapiens* [Frontiers of biology: The brain of homo sapiens], 241–65. Istituto della Enciclopedia Italiana, Rome.
- Bibok, Károly 2000. A lexikai jelentés és az aktuális jelentés kapcsolata a kétszintű konceptuális szemantikában és a generatív lexikon elméletében [The relationship between lexical meaning and actual meaning in Two-level Conceptual Semantics and Generative Lexicon Theory]. In: Tamás Gecső (ed.): *Lexikális jelentés, aktuális jelentés* [Lexical meaning and actual meaning], 56–63. Tinta Könyvkiadó, Budapest.
- Bibok, Károly – Enikő Németh T. 2001. How the lexicon and context interact in the meaning construction of utterances. In: Enikő Németh T. – Károly Bibok (eds): *Pragmatics and the flexibility of word meaning (Current Research in the Semantics/Pragmatics Interface 8)*, 289–320. Elsevier, Amsterdam.
- Bierwisch, Manfred 1997. Lexical information from a minimalist point of view. In: Chris Wilder – Hans-Martin Gärtner – Manfred Bierwisch (eds): *The role of economy principles in linguistic theory (Studia grammatica 40)*, 227–66. Akademie Verlag, Berlin.
- Blasko, G. Dawn – Cynthia Connine 1993. Effects of familiarity and aptness on metaphor processing. In: *Journal of Experimental Psychology* 19: 295–308.
- Erman, Britt – Beatrice Warren 2001. The idiom principle and the open choice principle. In: *Text* 20: 29–62.
- Fodor, Jerry 1983. *The modularity of mind*. MIT Press, Cambridge MA.
- Fónagy, Iván 1982. *Situation et signification*. John Benjamins, Amsterdam.
- Gee, James Paul 1999. *An introduction to discourse analysis*. Routledge, London.
- Geeraerts, Dirk 2000. Salience phenomena in the lexicon: A typology. In: Albertazzi (2000, 79–101).
- Gibbs, Raymond W. Jr. 1980. Spilling the beans on understanding and memory for idioms in conversation. In: *Memory and Cognition* 8: 449–56.
- Gibbs, Raymond W. Jr. 1994. *The poetics of mind: Figurative thought, language, and understanding*. Cambridge University Press, Cambridge.
- Gibbs, Raymond W. Jr. 1996. Metaphor as a constraint on text understanding. In: Bruce K. Britton – Arthur C. Graesser (eds): *Models of understanding text*, 215–40. Lawrence Erlbaum, Mahwah NJ.
- Giora, Rachel 1997. Understanding figurative and literal language: The graded salience hypothesis. In: *Cognitive Linguistics* 8: 183–206.
- Giora, Rachel 2003. *On our mind: Salience, context and figurative language*. Oxford University Press, Oxford.
- Gumperz, John 1982. *Discourse strategies*. Cambridge University Press, Cambridge.

- Gumperz, John 1992. Contextualization and understanding. In: Alessandro Duranti – Charles Goodwin (eds): *Rethinking context: Language as an interactive phenomenon*, 229–52. Cambridge University Press, Cambridge.
- Kecskes, Istvan 2000. A cognitive-pragmatic approach to situation-bound utterances. In: *Journal of Pragmatics* 32:605–25.
- Kecskes, Istvan 2001. The graded salience hypothesis in second language acquisition. In: Martin Pütz – Susanne Niemeier – René Dirven (eds): *Applied Cognitive Linguistics*. Vol. I., 249–71. Mouton de Gruyter, Berlin & New York.
- Kecskes, Istvan 2003. Situation-bound utterances in L1 and L2. Mouton de Gruyter, Berlin & New York.
- Kecskes, Istvan 2004. Lexical merging, conceptual blending, and cultural crossing. In: *Intercultural Pragmatics* 1:1–26.
- Kiefer, Ferenc 1996. Bound utterances. In: *Language Sciences* 18:575–8.
- Levinson, Stephen C. 2003. Contextualizing ‘contextualization cues’. In: Susan L. Eerdmans – Carlo L. Prevignano – Paul J. Thibault (eds): *Language and interaction: Discussions with John J. Gumperz*, 31–99. John Benjamins, Amsterdam.
- MacWhinney, Brian 1987. The competition model. In: Brian MacWhinney (ed.): *Mechanisms of language acquisition*, 249–308. Lawrence Erlbaum, Hillsdale NJ.
- Maley, Allen 1980. Teaching for communicative competence: Reality and illusion. In: *Studies in Second Language Acquisition* 3:11–6.
- Morris, William (ed.) 1976. *The American Heritage Dictionary of the English Language*. Houghton Mifflin, Boston MA.
- Nunberg, Geoffrey – Ivan Sag – Terry Wasow 1994. Idioms. In: *Language* 70:491–538.
- Sperber, Dan – Deirdre Wilson 1995. *Relevance: Communication and cognition*. Second edition. Blackwell, Cambridge MA & Oxford.
- Strauss, Claudia – Naomi Quinn 1997. *A cognitive theory of cultural meaning*. Cambridge University Press, Cambridge.
- Violi, Patrizia 2000. Prototypicality, typicality, and context. In: Albertazzi (2000, 103–23).
- Wray, Alison 2002. *Formulaic language and the lexicon*. Cambridge University Press, Cambridge.

Address of the author: Istvan Kecskes
 School of Education, ED 114
 State University of New York
 1400 Washington Avenue
 Albany NY, 12222
 USA
 ikecskes@uamail.albany.edu

MORPHOPRAGMATIC PHENOMENA IN HUNGARIAN

FERENC KIEFER

Abstract

Morphopragmatics is defined as the relationship between morphology and pragmatics, in other words, it investigates pragmatic aspects of patterns created by morphological rules. The paper discusses three morphopragmatic phenomena in Hungarian. The first one concerns the use of the excessive which does not add semantic information to the superlative and carries purely pragmatic information. It is used to express the highest possible degree of some property and it carries the conversational implicature that the speaker wants to draw the listener's attention to the importance of what he is saying. The second problem discussed has to do with the pragmatics of the diminutive suffix. The semantic meaning of the diminutive suffix is 'small' or 'a little' (the latter occurs with mass nouns), which, however, is often overridden by the pragmatic meaning. In most cases, the use of the diminutive signals a positive emotional attitude, but it may carry a pejorative meaning, too. Finally, the third phenomenon concerns the pragmatics of the possibility suffix *-hat/-het*. From among the various pragmatic meanings the deontic speech acts are well known from other languages. There are, however, several other uses which seem to be typical of Hungarian. Two of these are particularly interesting: (a) the context may turn possibility into necessity, (b) the verb *mond* 'say, tell' suffixed by the possibility suffix may carry the pragmatic meaning 'say/tell in vain'. In addition to these two uses, several others will be discussed.

1. Introduction

Morphopragmatics investigates the relationship between morphology and pragmatics. Semantic meaning is not dependent upon the context of the utterance: it is predictable on the basis of lexical meaning, sentential context and the syntactic structure of the utterance. On the other hand, pragmatic meaning also depends on the speech situation and is not predictable in general. Speech situation includes, among other things, the speaker, the listener, the relationship between speaker and listener, as well as the time and place of utterance. Pragmatic meaning entails semantic meaning; hence the investigation of the former must take the latter as its starting point. The main task of pragmatics is the investigation

of meaning as determined by the speech situation, whereas the description of speech-situation-independent meaning is the job of semantics.¹ In this paper, the notion of pragmatics is understood as specified above, similarly to my earlier papers and book (Kiefer 1983a;b; 1999; 2000).

Morphology is pragmatically relevant whenever an affix (whether inflectional or derivational) occurring in a morphologically complex word or a pattern of compounding refers to the speech situation, making one or some of its parameters manifest. Morphopragmatics investigates pragmatic aspects of patterns created by morphological rules, rather than those of individual morphological objects. In other words, the issue is not what pragmatic consequences follow from the use of, say, diminutive *lábacska* 'little foot' or *kezecske* 'little hand'—but rather whether the rule creating diminutive forms (briefly: the diminutive suffix) has some pragmatic consequence, and if it does, what kind of pragmatic consequence it has, with respect to a well-defined semantic range of bases. Pragmatic meaning may of course vary depending on what semantically determined subclass of bases the rule is applied to.² In that respect, morphopragmatics does not differ from morphosemantics; in the case of the latter, semantics is made to bear on morphological rules.

Morphopragmatics has to be distinguished both from lexical pragmatics and from syntactic pragmatics.³ Lexical pragmatics deals with pragmatic aspects of lexemes. For instance, two lexemes with identical denotative meanings may refer to two different speech situations: *eszik* 'eat' vs. *zabál* 'devour', *alszik* 'sleep' vs. *durmol* 'saw the wood' (Kecskés 2003). Lexicalised morphological formations also belong here: *elromlik* 'break down' vs. *bedöglik* 'go phut', *meghal* 'die' vs. *elpatkol* 'pipe off', etc. The investigation of pragmatic consequences, if any, of syntactically required affixes belongs to the realm of syntactic pragmatics. If, for instance, there is a pragmatic difference between *elnökül választ* 'vote sy for

¹ Theories treating semantics as a separate module accept this interpretation of pragmatics. Cf. Swart (1998, 11–4) and Kearns (2000, 254–81), to mention two recent textbooks on semantics.

² The input conditions of a morphological rule include the meaning of the base and that of the affix. The meaning of the derivative will be compositional and is part of the output of the rule.

³ Obviously, phonology also has its pragmatic aspects; hence we can further speak of phonological pragmatics. Since, however, morphopragmatics can hardly be confused with phonological pragmatics, the only areas that have to be explicitly demarcated from morphopragmatics here are lexical and syntactic pragmatics.

the role of chairman' and *elnöknek választ* 'vote sy into the chair', then the discussion of that pragmatic difference is the task of syntactic pragmatics (Dressler–Merlini-Barbaresi 1993).

Morphopragmatics entails semantics; hence in investigating morphopragmatic phenomena one must first determine the semantics of some process of inflection or word formation and then derive pragmatic meaning from it, in view of the sentential context and the speech situation. Sentential context only plays a role in a more exact determination of the semantic meaning of a sentence/utterance.

The existence of morphopragmatic phenomena can be primarily expected in areas where there are competing morphological rules (for instance, in the case of the denominal verb forming suffixes *-(V)z* and *-(V)l*), or where a morphological rule contributes to the denotative meaning of a word to a very slight extent or not at all (this is the case with the diminutive suffix), or where a morphological rule is not prototypical for the given area (inflection, derivation, compounding). For instance, comparative/superlative formation is not prototypical either as a process of inflection or as one of derivation (cf. Dressler 1989).⁴

In this paper, I will discuss some phenomena of Hungarian morphology that are especially interesting from a morphopragmatic point of view; in particular, the excessive, diminutive formation, and the modal suffix *-hat/-het* 'may, can'. On the basis of Dressler's criteria, none of these can be regarded as prototypical cases of derivation.⁵ This is the only property that all three phenomena share; what motivates their discussion here is that the pragmatic relevance of morphology is the most conspicuous within Hungarian derivation in just these three cases.

⁴ Positing a continuum between inflection and derivation has a number of advantages: (a) it explains the order of derivational, in addition to inflectional, suffixes; (b) it gives an explanation for phenomena of the acquisition of morphology; (c) it makes pragmatic relevance predictable. Dressler (1989) makes use of twenty criteria in determining the differences in degree between inflection and derivation. Only three of those criteria will be mentioned here: (a) inflection is more productive than derivation as the latter involves various limiting factors; (b) prototypical inflection does not lead to a change of word class, whereas prototypical derivation does; (c) inflection serves syntax (has syntactic consequences), whereas in the case of derivation syntactic relevance only shows up via the change of word class involved.

⁵ Generative grammar, thinking as it is exclusively in terms of dichotomies, has to make its choice of whether it regards *-hat/-het* as an inflectional or a derivational suffix, whereas theories that accept continua do not have to do that.

2. The excessive⁶

In the Hungarian National Text Corpus,⁷ a number of examples involving the excessive can be found (see (1) and (2)). As the examples in (2) show, the prefix *leg-* may occur as many as three times in a given word form (but more than two occurrences of *leg-* are rare, even though *leg-* prefixation is in principle freely iterable, restricted by productional and perceptual considerations only). Excessive formation is fully productive (all gradable adjectives can be prefixed for the excessive) and lexicalised instances do not occur.

- (1) (a) Mondhat bárki bármit, a szerelem a világon a *legesleg*jobb dolog.
'No matter what anybody says, love is absolutely the best thing in the world.'
- (b) A *legesleg*nagyobb öröm félelem nélkül élni.
'To live without fear is absolutely the greatest pleasure.'
- (c) A király [...] berontott a trónterembe, annak is a *legesleg*eldugottabb sarkába, ott dühöngött [...].
'The king [...] rushed into the presence chamber, into absolutely the most remote corner of it, and went on fretting and fuming there [...].'
- (d) Balmazújvárosból jött, a *legeslegs*zegényebbek mélyvilágából.
'He comes from Balmazújváros, the depths of absolutely the deepest poverty.'
- (e) [...] én vagyok a *legesleg*rosszabb kedvű.
'[...] I am in absolutely the worst mood of all.'
- (2) (a) [...] az ellenőrzöttek ugyanazt a trükköt használják, mint az ellenőrzők *legeslegesleg*felsőbb főnöke.
'[...] those controlled make use of the same trick as the absolutely absolutely topmost boss of the controllers.'
- (b) Szerintem a *legeslegesleg*finomabb csokiból kettő van [...].
'I guess we have two pieces of absolutely absolutely the best chocolate [...].'

The superlative, as is known, semantically expresses the highest degree along some scale of values. There is nothing better than the best, nothing greater than the greatest, nothing more remote than the most remote,

⁶ The pragmatics of the excessive was first discussed in Dressler – Kiefer (1990). This section is a more elaborate version of what was said in that paper.

⁷ All examples cited in this paper (unless noted otherwise) have been gleaned for me from the Hungarian National Text Corpus by Gábor Kiss whom I wish to thank here. The Corpus contains approx. 150 million running words at present; I have looked at roughly 500 randomly chosen occurrences of each of the patterns under scrutiny here, with a roughly ten-word context taken into consideration in each case.

nobody poorer than the poorest, nothing worse than the worst. Therefore, the superlative and the excessive are not different semantically; it is only in pragmatic terms that the latter can differ from the former.⁸ For instance, in (1d), the superlative would do just as well since there can be no semantic difference between *leg-* and *legesleg-*: whoever is *poorer* is poor, and whoever is *the poorest* is even more so; there is no further room for even deeper layers of poverty (semantically speaking). Thus, the function of the excessive must be something else: it expresses that the speaker thinks the place where the person comes from is as poor as can be and that he would like to draw the listener's attention to that fact emphatically. The superlative refers to the highest degree of a scale, thus *x is the poorest* means that of all the individuals considered, *x* represents the poorest one. This is exactly what the excessive means, too—except that it also suggests that *x* could not possibly be even poorer than he already is and that the speaker would like to draw the listener's attention to that. Accordingly, the excessive always has some emotional colouring, as opposed to the superlative that is usually the result of factual comparison (but see (3)). The semantic meaning of superlative and excessive is therefore the same, but the latter, as opposed to the former, carries some pragmatic meaning as well.

In everyday speech, the excessive is one way of expressing a hyperbole. In a hyperbole, what is big is seen/shown to be bigger than life, what is small is presented as smaller than it actually is, a feature that increases the perceived intensity of the phenomenon at hand. Even a simple superlative may often do that, e.g., when a deceased relative is described in a death notice as “the most faithful husband, the best father”, and so on. A sequence of superlatives or excessives is especially well suited to arousing the listener's attention, to heighten tension. Here is a widely known literary example. Madame de Sévigné begins one of her letters to her daughter as follows:⁹

- (3) What I will write about now is the most surprising, the most amazing, the most wonderful, the most fascinating, the most triumphant, the most astounding, the most unbelievable, the most unexpected, the most gigantic and the tiniest, the most ordinary and the brightest, even today the most clandestine, the most glamorous, and the most enviable history.

⁸ In Dressler–Kiefer (1990) I mistakenly claimed that there is a presuppositional difference between the superlative and the excessive.

⁹ Cited in Hungarian translation by Fónagy (1975, 481).

If we replace all superlatives in (3) by excessives, the passage only becomes even more effective.

What is *more urgent* is urgent enough; what is *the most urgent* is obviously even more so. Similarly, *more shameful* is shameful, and clearly *the most shameful* is also that. *The most urgent* is the highest degree of urgency: *absolutely the most urgent* cannot be more urgent than that: the excessive and the superlative do not differ semantically:

- (4) (a) Milyen feladatok megoldását látja legsürgősebbnek? — A *legeslegsürgősebb* az M1-es autópályát üzemeltető társaság pénzügyi gondjainak megoldása.
'What do you think are the most urgent tasks? — Absolutely the most urgent one is to solve the financial troubles of the company running the M1 motorway.'
- (b) [...] a túlzófok használata sem merész, az a *legeslegszegeylenetesebb*, amikor a szégyen lehetőségét is kétségbe vonja [...].
'[...] it is not too bold to use the excessive here: absolutely the most shameful thing is that he doubts even the possibility of shame [...].'

In (4a), the speaker wishes to draw his listeners' attention to the urgency of the task, and in (4b), to the shameful character of the situation concerned. In the given speech situations, the highest possible degree of urgency and the highest imaginable degree of shamefulness is referred to.

Almost half of the 500 utterances involving excessive, chosen at random from the corpus, include the forms *legeslegjobb* 'absolutely the best', *legeslegnagyobb* 'absolutely the biggest/greatest', and *legeslegújabb* 'absolutely the newest'. Further very frequent forms (with 20 to 30 occurrences each) are *legeslegutolsó* 'absolutely the very last', *legeslegvégső* 'absolutely the most final', *legeslegelső* 'absolutely the very first', *legeslegelőször* 'absolutely the very first time', *legeslegutoljára* 'absolutely the very last time', *legeslegvégére* 'absolutely to the very end', *legeslegelején* 'absolutely in the very beginning', *legeslegvégén* 'absolutely in the very end'. Consider a few examples:

- (5) (a) A szakszervezeti főbizalmi jelentéséből a *legeslegutolsó* bekezdést hadd olvassam el [...].
'Let me read out absolutely the very last paragraph of the report of the chief trade union steward [...].'
- (b) Az igazság az, hogy a megszakítás az a *legeslegvégső* eszköz, amihez a sportszakmai személyzet nyúl [...].
'The truth is, interruption is absolutely the last measure that the body of sports experts will take [...].'

- (c) [...] Svédország külügyminisztere a *legeslegelső* feladatnak nevezte, hogy
[...].
'[...] the foreign minister of Sweden said it was absolutely the first task of
all to [...].'
- (d) Minden feltört dióba, szétzúzott kő belsejébe te pillantasz be *legeslegelőször*.
'You will be absolutely the first one to glance into every cracked nut, into
every smashed stone.'

In all these cases, the use of the excessive can be paraphrased as follows: the speaker wants to draw the listener's attention to the importance of the event he is speaking about. Words that unambiguously define (extreme points of) spatial order or temporal sequence are semantically ungradable. Even *utolsó* 'the last' and *legutolsó* 'the very last' are not semantically different; hence *legutolsó* 'the very last' and *legeslegutolsó* 'absolutely the very last' cannot involve any semantic difference, either. By using the excessive in (5a), the speaker wants to suggest that he considers the last paragraph of the report to be important (in the given speech situation). The same applies to *legeslegvégső* 'absolutely the most final' in (5b). In (5c), the context is Hungary joining the European Union, an event that the speaker probably considers to be an important task even more than the Swedish foreign minister does. Likewise in (5d), it is the wider context that explains the use of the excessive: the text is about secrets and miracles. The speaker wants to call the listener's attention to these.

It is interesting to note that the excessive never occurred in the corpus as the opposite of a positive or comparative (and rarely as the opposite of a superlative) adjective, i.e., no examples similar to the constructed ones below (that is, where the excessive is used instead of the repetition of an adjective in the positive) have been found, though it is clear that the excessive can be used as a corrective device.¹⁰

- (6) (a) Mi az utolsó határidő? — A *legeslegutolsó* határidő augusztus 31.
'What is the last deadline? — Absolutely the very last deadline is 31 August.'
- (b) Szép ruhát vegyek fel? — A *legeslegszebbet*.
'Shall I wear a pretty dress? — Absolutely the prettiest possible.'

This is probably due to the fact that the corpus does not contain a large amount of dialogues.

In sum, the excessive does not differ semantically from the superlative: both signal the highest degree of the property referred to by the ad-

¹⁰ See also Dressler Kiefer (1990, 71).

jective. Whatever the excessive additionally conveys in the given speech situation belongs to pragmatics. In a pragmatic interpretation of the excessive, an important role is played by the speaker's intention, the aim he wants to achieve with what he says, the strategy employed. The listener knows that the excessive is semantically identical with the superlative; hence he also knows that it is not the denotative meaning of the utterance that the speaker wants to enrich by using the excessive. The use of that form can only be relevant if the speaker wishes to convey some pragmatic meaning that cannot be expressed by the denotative meaning. As we have seen, that pragmatic meaning is that the speaker wants to draw the listener's attention to the importance of what he is saying by emphasising the highest possible degree of some property. That meaning appears to the listener as a conversational implicature. In the case of words unambiguously describing spatial order or temporal sequence, the superlative carries a pragmatic meaning already; the excessive just strengthens it even more.¹¹ In that case, we cannot speak of the highest possible degree of some property in the first place.

3. The diminutive suffix

In what follows, the pragmatic meanings of the diminutive suffixes *-cska/-cske* and *-ka/-ke* will be discussed; we ignore the diminutive suffix *-i*. Of the two suffixes mentioned, *-cska/-cske* is the more productive one since its use is limited by fewer conditions.¹² The two suffixes do not differ either semantically or pragmatically. The basic meaning of the diminutive suffix is 'small, a little'; the meaning 'a little' (i.e., 'not much') occurs with mass nouns (e.g., *tejecske* 'a little milk'). However, that basic meaning is often overridden by the pragmatic meaning (Dressler–Kiefer 1990; Dressler–Merlini-Barbaresi 1993; Kiefer 1998; and see below). The derivational process is of almost unlimited productivity in the case of monomorphemic bases, and lexicalisation is very infrequent.¹³

¹¹ Comparative forms of *elején* 'in the beginning of', *végén* 'in the end of', *utolsó* 'the last' do not exist.

¹² The distribution of the two diminutive suffixes essentially depends on phonological properties of the base. The issue is discussed in detail in Kiefer–Ladányi (2000).

¹³ Derived words often preclude the use of a diminutive suffix. For instance, abstract nouns in *-ság/-ség* '-ness' cannot be diminutivised (**jóságocska* 'little goodness', **szélességecske* 'little width'); nor can deverbal nouns in *-ás/-és* '-ing' denoting

The speaker can always use a diminutive suffix to convey some pragmatic meaning: e.g., *fonémácska* 'small phoneme' (referring either to a phoneme that is the speaker's special favourite or to one that has a very limited distribution), *definíciócska* 'little definition' (the definition is either not very significant or else it is not full, not faultless, etc.), *implikaturácska* 'tiny implicature' (minor, insignificant implicature, or one that is the speaker's favourite, etc.). A more exact definition of the pragmatic meaning involved can only be given if the wider sentential context and the speech situation are known.

In this section, I will provide a more detailed overview of the typical uses of the diminutive suffix in Hungarian than is given in the papers cited above, on the basis of the material of the Hungarian National Text Corpus. I wish to emphasise, however, that the discussion will be restricted to the typical uses.¹⁴ The occurrence of diminutive forms cannot be predicted; but the typical speech situations in which they tend to be used can be listed. We will see that the pragmatic meaning of the diminutive suffix can be derived, in general, from its semantic meaning, the sentential context, and the speech situation. Also, it is possible to determine the typical semantic fields that are compatible with the given pragmatic meaning of the diminutive suffix. It is to be emphasised, however, that in principle the speaker can use the diminutive form of any base at any time; incompatibility may only arise between certain lexical fields and certain speech situations. Thus, for instance, it is unlikely that lovers should indulge each other with diminutive forms of abstract nouns.

The pragmatic meaning of the diminutive suffix depends on the meaning of the base, too; in other words, the meaning of the base contributes to whether the diminutive form should be attributed both its semantic and pragmatic meanings, or primarily some pragmatic meaning only. This does not contradict the assumption that morphopragmatics is for the investigation of pragmatic consequences of morphological rules. The input of morphological rules has to include reference to the semantic range of bases for which the diminutive suffix has the meaning 'small

events (**ásásocska* 'a little digging', **nézésecske* 'a little watching'). Examples of lexicalised derivatives include the event nouns *főzőcske* 'a doll's dinner party', *fogócska* 'game of tag', *bújócska* 'hide and seek', as well as *tálka* 'bowl', *asztalka* 'small table', *szócska* 'small word, particle'.

¹⁴ 'Typical use' will simply be taken to be coterminous with frequency of occurrence in the corpus studied: a use is typical of it occurs at least 20 times in the randomly selected 500 examples.

object'. In the examples that follow, the diminutive suffix carries its semantic meaning only:

- (7) (a) Ez a *könyvecske* az első önálló magyar nyelvű neveléstudományi-didaktikai szakkönyv.
'This small book is the first independent textbook on the theory of education and didactics ever published in Hungarian.'
- (b) Mindennap megnézi a postaládát, csikorog a kulcsocsk a zárban [...].
'She looks into the mailbox each day, the little key scroops in the lock [...].'
- (c) Mind ez ideig remélték, hogy a lelőhelyről több ilyen kőlapocsk a előkerül még [...].
'They have been hoping so far that more such tablets would be found at the place of discovery [...].'

This meaning can be reinforced by the immediate context (the presence of the adjective *kis* 'small'):

- (8) (a) Egész sor kis ablakocsk a [...].
'A whole row of small windows [...].'
- (b) A kis *könyvecske* [...].
'The small booklet [...].'
- (c) Az a kis házacsk a [...].
'That small house [...].'

In the environment of a diminutive noun we often find adjectives like *kis* 'small', *pici* 'tiny', *törpe* 'miniature' that merely reinforce the diminutive meaning since in examples like (8a–c) the meaning 'small' is present even without the adjective. To generalise this observation: diminutive forms of names of physical objects usually enrich the meaning of the base by the semantic feature 'small' and have no pragmatic meaning.

But this does not preclude, even in such cases, the possibility that the speaker uses the diminutive suffix to convey pragmatic meaning. It is easy to imagine situations in which the speaker refers to large objects by *könyvecske* 'small book, booklet', *kulcsocsk a* 'small key', *kőlapocsk a* 'tablet'. Suppose, for instance, that someone is reading a very large codex. By asking *Mit olvasol abban a könyvecskében?* 'What are you reading in that tiny little book?', the speaker may emphasise the large size of the book. In that case, the use of the diminutive suffix is 'non-serious', since it means just the opposite of what it is supposed to mean. When 'small' stands for 'large', the speech situation can invariably be characterised by the attributes 'funny', 'non-serious'. It is no surprise

therefore that Dressler–Merlini-Barbaresi (1993) takes the feature ‘non-serious’ to be the invariant pragmatic meaning of the diminutive suffix: that meaning is in fact present in most uses of that suffix (see below).¹⁵ However, the presence of that feature is only obvious in cases where ‘small’ does not actually mean small. In the cases illustrated by (9), (11), and (12) below, the feature ‘non-serious’ is not present.

Names of tiny animals are often used in a diminutive form, except in scientific discourse. Pragmatically, the presence of the diminutive suffix suggests that the speaker wants to express his emotional attitude—something that a technical text would not tolerate. From the use of diminutive forms, then, we can conclude that the text is not a scientific one. This use is illustrated in (9a–d):

- (9) (a) [...] ahány méhecske egy nyitott mézesbödön körül zümmög nyáron a kertben.
 ‘[...] like the number of bees buzzing around an open jar of honey in the garden, in summer.’
- (b) [...] egy mumifikált mutáns méhecske.
 ‘[...] a mummified mutant bee.’
- (c) [...] tántorog az összeharapdált legyecské [...].
 ‘[...] the fly, bitten all over, is staggering [...].’
- (d) Egérkéekkel kísérleteztek.
 ‘They were experimenting with mousies.’

Bees give us honey, so we tend to be fond of them;¹⁶ and we pity both the fly bitten all over and the little mouse used as a laboratory animal. Why do people use a diminutive suffix with names of animals that are small anyway? The semantic meaning of the diminutive suffix (whereby *méhecske* = ‘small bee’) yields its place to the pragmatic meaning in this case: the speaker has an emotional attitude to the entity referred to by

¹⁵ This only means, of course, that whenever the diminutive suffix does have a pragmatic meaning, that meaning may be connected with the feature ‘non-serious’. Otherwise the feature ‘non-serious’ could be taken to be a semantic, rather than pragmatic, property. The feature ‘non-serious’ is by no means interchangeable with the feature ‘ironical’ (as suggested by one of the anonymous reviewers of this paper) since irony can only be spotted in utterances like (16e) below.

¹⁶ The form *méhecske* is often used for phonological convenience only; the form *méh* vacillates between two pronunciations with or without dropping the final *h*. Many people simply say *méhecske* in order to avoid that difficulty (Péter Siptár, personal communication). In this case, the diminutive suffix does not contribute any meaning, semantic or pragmatic.

the noun, and wishes to communicate that attitude. The exact nature of the emotion concerned can only be determined, of course, by examining the speech situation.

Diminutive forms of animal names, with the exception of cases exemplified in (9), occur in texts meant for small children (especially in fairy tales), cf. (10a–d):

- (10) (a) [...] *kis ló, hiszen te beszélni is tudsz, táltos paripácska, kis cigány lovacska.*
 '[...] little horse, so you can speak, little magic steed, little Gypsy horsey.'
- (b) [...] *kakas és a tyúkocska, szlovák népmese* [...].
 '[...] rooster and the little hen, Slovakian folk tale [...].'
- (c) [...] *két iciri-piciri ökröcske.*
 '[...] two teeny-weeny little oxen.'
- (d) *Szamárka, ökröcske, juhocska* [...].
 'Little donkey, little ox, little sheep [...].'

The world of tales is an imaginary world, one in which everything looks smaller or downright small. Words like *lovacska* 'little horse', *tyúkocska* 'little hen', *ökröcske* 'little ox', *szamárka* 'little donkey', *juhocska* 'little sheep' can refer to full-grown animals, too. The world of tales is 'non-serious' because it does not directly reflect reality. The transposition of the real world into that of tales is carried out by the help of the diminutive suffix here. Hence, *paripácska* is not 'a small magic steed', just like *tyúkocska* is not 'an undersize hen'. The corresponding adjective plus noun constructions (*kis X* 'small X') do not convey the pragmatic meaning of the diminutive forms. *Paripácska* 'little horse', *tyúkocska* 'little hen', *ökröcske* 'little ox', *szamárka* 'little donkey', *juhocska* 'little sheep' only occur in specific contexts like tales told to little children or adult-child dialogues.

Three typical speech situations in which diminutive suffixes are generally observed to be often used are missing from the corpus.¹⁷ When a mother talks to her small child (motherese,¹⁸ baby talk), she typically uses diminutive forms. The bases concerned are primarily names of body

¹⁷ With respect to these contexts, cf. Dressler – Merlini-Barbaresi (1993, 116–70). The use of diminutive suffixes in such functions is very frequent, in addition to Hungarian, in Southern German dialects, in Italian, in Spanish and in Slavic languages, too.

¹⁸ Since the speech of fathers, grandparents, close relatives, caretakers may be characterised by the same features, the term *caretaker speech* is often used instead (Crystal 1994, 258).

parts and names of kinds of food that belong to the diet of a small child, but names of objects with which a small child gets into contact (*párnácska* 'little pillow', *ágyacska* 'little bed', *kendőcske* 'little shawl', *labdácska* 'little ball', etc.) may also occur. The three semantic fields just mentioned can be illustrated by the following constructed examples:

- (11) (a) Add ide a kezecskédet!
'Give me your little hand.'
- (b) Tedd ide szépen a fejecskédet!
'Put your little head down here.'
- (12) (a) Kérsz még egy kis tejecskét?
'Do you want some more milkie?'
- (b) Kapsz mindjárt egy kis vízecskét.
'You will get a little water right away.'
- (13) (a) Gyere, megigazítom a párnáskádat.
'Come, let me fix your little pillow.'
- (b) Kéred a kendőcskédet?
'Do you want your little shawl?'

The body parts of a small child are really small—but the amount of milk or water offered need not actually be little. And what is more important: one would never offer milk or water to an adult using *kis tejecske/vívecske* 'a little milkie/water' even if it is a very small amount of milk or water: (12a–b) thus unambiguously signal baby talk.¹⁹ The same applies to (13a–b): apart from the fact that the pillow or shawl may be 'normal' size, these diminutive forms are not used in adult-to-adult conversation. And since in such cases diminutive names of body parts are not normally used either, utterances like (11)–(13) automatically evoke a particular speech situation that primarily refers to the relation between mother and small child; but in the case of (11a–b) the addressee could be a lover, or in the case of (12a–b), a pet animal. Owners of dogs or cats often address their pets using diminutive nouns. The three speech situations, talking to a small child, a lover, or a pet, are clearly distinct. Nevertheless, with respect to the pragmatic meaning of the diminutive

¹⁹ This is not to say that diminutive forms may not be used within a family or a small community even in adult conversation. However, such exceptions do not invalidate the claim in the text, since in this case an adult listener is treated as if he was a child.

suffix, there is not much of a difference: the suffix expresses endearment, loving, fondness here.

In baby talk, the diminutive forms of names of body parts generally retain their original semantic meaning; for love talk this does not necessarily hold. An adult foot (if not overly big) can be referred to as *lábacska* 'little foot', and an adult mouth as *szájacska* 'little mouth'.

(14) (a) Nagyon szeretem a szép szájacskádat.
'I love your nice little mouth a lot.'

(b) Mutasd a formás lábacskádat!
'Let me see your shapely little foot.'

In all three cases (where the partner is a small child, a pet, or a lover), the use of the diminutive suffix is controlled by the speech situation in which the decisive criterion is the relationship between speaker and listener. The diminutive suffix primarily conveys the speaker's emotion (joy, happiness, love, affection).

Bor 'wine', *sör* 'beer' and *konyak* 'brandy' (names of other alcoholic drinks did not occur in the corpus) also often occur in casual speech with a diminutive suffix.²⁰ Since *borocska* 'little wine', *söröcske* 'little beer', *konyakocska* 'little brandy' are characteristic of adult casual speech, their use signals both that the speaker takes his relationship to the listener to be an intimate one and that he is on good terms with alcoholic drinks. One would never speak of *borocska* if one did not like wine. The use of the diminutive suffix does not relate to the amount of drink involved. Utterances like (17a–c) only occur in adult conversation:

(15) (a) [...] a konyakocska helyében [...].
'[...] in place of the little brandy [...].'

(b) [...] egyébként nagyon finom borocska is hozzájárul [...].
'[...] otherwise very nice little wine also contributes [...].'

(c) Export a söröcske.
'The little beer is an exported brand.'

Diminutive forms of names of intellectual products, political or other organisations, as well as functions/occupations are mostly pejorative. The

²⁰ The noun *vodka* may also take the diminutive suffix (*vodkácska*) since the ending *-ka* is not identified as a Hungarian diminutive suffix in it. The names of other spirits may, of course, also be diminutivised: *tequilácska*, *cinzanócska*, *armagnacocska*, etc.

positive emotions (joy, happiness, affection) that are so characteristic of diminutive forms used in other speech situations are not found here.

- (16) (a) [...] kénytelen turáni újságocskával vigasztalódni.
'[...] he has to comfort himself by publishing a little Turanian newspaper.'
- (b) [...] kompromisszumokból álló szegényes reformocskával [...].
'[...] a miserable little reform consisting of compromises [...].'
- (c) [...] minden kis pártocskák igyekeznek parlamenti képviselőt biztosítani magá-
nak [...].
'[...] all little parties try to make sure they are represented in Parliament [...].'
- (d) Ez lenne tehát a *Kóstoló* című műsorocskák „nyári koktélja”, mondja eufem-
isztikusan egy titokzatos hang.
'This should be the “summer cocktail” of the little program called *Foretaste*,
a mysterious voice says euphemistically.'
- (e) [...] nem valószínű, hogy valamelyik helyi elnököcske ugyanerre a következ-
tetésre jut az elemzésben [...].
'[...] it is unlikely that some local little chairman should come to the same
conclusion in his analysis [...].'

From (16a) it becomes clear that the newspaper involved is not a serious, well-known one; from (16b), that the reform is not an overall one; (16c) tells us that the parties we are talking about are not only small but also insignificant; (16d) that the program is not of a very high quality; and finally, (16e) suggests that the chairman cannot be that of a serious organisation or company but that he is fond of making a fuss. These or similar conclusions can be drawn from the presence of the diminutive suffix itself; the context, at most, reinforces our conclusion or makes it more precise. The meaning 'small' is in some sense present in all diminutive nouns of the utterances in (16a–e), that is, their semantics does not get lost altogether, but the point is not in the semantic meaning. The difference is clearly shown by comparing the following pairs: *kis újság* 'small paper' – *újságocskák* 'little paper', *kis reform* 'minor reform' – *reformocskák* 'little reform', *kis párt* 'small party' – *pártocskák* 'little party', *kis műsor* 'short program' – *műsorocskák* 'little program'; *elnököcske* 'little chairman' cannot even be opposed to *kis elnök* 'a short chairman'.²¹ The

²¹ It is possible that diminutive forms of words denoting a function or occupation are all pejorative in their meaning (cf. also *igazgatócska* 'little director', *mérnököcske* 'little engineer'); 'little' in this case equals 'insignificant, trifling, trivial, petty', i.e., the meaning component 'little' is understood to refer to the director's or engineer's significance, not his size.

adjective–noun constructions do not carry the pragmatic meanings of the diminutive forms. On the other hand, it is clear that the latter do contain the meaning component ‘small’; if that was not the case, expressions like **nagy újságocska* ‘big little newspaper’, **nagy reformocska* ‘big little reform’, **nagy pártocska* ‘big little party’, **nagy műsorocska* ‘big little program’ should be acceptable.

Let us finally add that some adjectives of negative meaning may also take a diminutive suffix that subdues or tones down the negative meaning and hence the impoliteness involved.

- (17) (a) Talán, hogy túlságosan szeleverdi? Vagy ostobácska, butuska?
‘Maybe she’s too light-headed? Or a little stupid, a little silly?’
- (b) [...] bájosan butácska, de hűséges segítőtársát, Hálefet, a szolgát [...].
‘[...] his charmingly silly but faithful helper, Haleph, the servant [...].’
- (c) Az viszont gyöngécske érv, hogy lám, a nagy európai [...].
‘On the other hand, it is somewhat poor for an argument that, see, the great European [...].’
- (d) A gyengécske Trnava elleni összecsapáson a bíró 43 szabálytalanságot [...].
‘During the match against the weakish team of Trnava, the referee awarded 43 fouls [...].’
- (e) OK bunkócska, akkor a Pagony Lajos vagy, ami [...].
‘Okay you little boob, then you must be Lajos Pagony, a fact that [...].’

We do not always prefer to tell the truth; to name a negative property is something that we especially try to avoid, for reasons of politeness, in everyday speech situations. Therefore, we resort to various ‘subduing’ strategies. One of these is negation of the positive adjective: ‘not clever’, ‘not strong’. But we also often use diminutive forms for the same purpose. We do not say that someone is *ostoba* ‘stupid’, *buta* ‘silly’, or *bunkó* ‘boorish’, but rather that he is *ostobácska*, *butuska*/*butácska* or *bunkócska*. It is true that *ostobácska* may simply mean ‘stupid’ or ‘rather stupid’, but how much better it sounds! The team is not weak but weakish, which is less categorical. Similarly, we can say someone is *lustácska* ‘a little lazy’, *rosszacsk*a ‘a little bad’, *betegecske* ‘a little ill’. Of adjectives referring to a positive property, it is only *okoska* ‘cute little’ that the corpus contained data of; but of course *szépecske* ‘nice little’, *ügyeske* ‘skilful little’, *csinoska* ‘pretty little’ etc. can also be formed with ease. In this case, the function of the diminutive suffix is obviously not subduing but rather being amiable. However, productivity is out of the question in this case since the range of basic adjectives cannot be freely extended.

The semantic meaning of the diminutive suffix is in all cases 'small, a little'; that meaning can be modified or added to in various speech situations that are accounted for within pragmatics. We have seen that diminutive forms are used in various speech situations and that the meaning of the diminutive suffix will change or be modified accordingly, in several different ways. In most cases, it signals a positive emotional attitude of the speaker towards the person or thing denoted by the base, but it may carry a pejorative meaning, too.

4. The modal suffix *-hat/-het*

The suffix *-hat/-het* 'may, can' differs from verb forming suffixes in a number of basic respects: (a) it does not produce a new verb, as evidenced by a total lack of lexicalisation; (b) verbs suffixed by it cannot be further suffixed to become infinitives or participles (**játszhatni* 'to be able/allowed to play', **játszható* 'being able/allowed to play', **játszhatott* 'one that was able/allowed to play', **játszhatandó* 'one that will be able/allowed to play', **játszhatva* 'while being able/allowed to play');²² (c) suffixation by *-hat/-het* is not restricted by any condition (a property characteristic of inflection but not of derivation). Therefore, we are entitled to exclude *-hat/-het* from among prototypical derivational suffixes.²³

The suffix *-hat/-het* can express various modal meanings (Kiefer 1981; 1985). Of the types of modality, it is primarily deontic modality that is normally taken to be pragmatically relevant, since it is closely connected to what are called deontic speech acts (command, prohibition,

²² Of course, *játszható* 'playable, something that can be played', formed by the adjective forming suffix *-ható*, is grammatical; what is claimed to be ungrammatical here is the participial form (in *-ó*) of the verb *játszhat*. Similarly, *játszhatott* is only unacceptable as a past participle; as a past-tense verb form 'he was able/allowed to play, he may have played' it is quite all right. Compare *a gyerek játszhatott* 'the child was allowed to play' vs. **a játszhatott gyerek* 'the child that was allowed to play'. We only say that something 'can be derived' if the forms at hand can be derived in a productive way (i.e., in a way that can be stated in a rule). Occasional formations like *olvashatni* 'one can read about it', *mondhatni* 'one could say; as it were' are marginal and are not evidence of productive derivability.

²³ Given the fact that we accept the continuum view in this paper, we do not have to decide if *-hat/-het* is a derivational suffix or an inflectional one. See also footnotes 4 and 5.

permission, exemption).²⁴ However, we have to draw a distinction between deontic modality and deontic speech acts (Kiefer 1998). Deontic modality only expresses deontic possibility or deontic necessity; in order for utterances involving deontic modality to express deontic speech acts, other conditions have to be met, too. Such conditions are a hierarchical relationship between speaker and listener, the speaker's conviction that the action can be performed, and time and place appropriate for performing the action. All in all, deontic speech acts can only be performed if all necessary parameters of the speech situation are present. Typical deontic speech acts are illustrated by (18a–d).

- (18) (a) *Este elmehetsz moziba.* 'You can go to the cinema tonight.'
- (b) *Este nem mehetsz el moziba.* 'You cannot go to the cinema tonight.'
- (c) *Este el kell menned moziba.* 'You must go to the cinema tonight.'
- (d) *Este nem kell elmenned moziba.* 'You need not go to the cinema tonight.'

If the background to the utterances in (18a–d) is taken to be the set of permitted and forbidden, advised and not advised things, then (18a) expresses that going to the cinema tonight is among the things permitted, and (18b) expresses that going to the cinema tonight is among the things not permitted. The present state of affairs may make going to the cinema tonight necessary, as expressed by (18c), or may not make going to the cinema tonight necessary, as stated in (18d). (18a–d) as they stand are statements of facts, not speech acts. They turn into speech acts if the speaker has the appropriate authority and assumes that his utterances will have the intended effect on the listener. In such a speech situation, (18a) can be interpreted as giving permission, (18b) as prohibition, (18c) as a command, and (18d) as exemption.²⁵ If the relationship between speaker and listener, the social status of the participants is not the appropriate one, (18a–d) cannot be interpreted as deontic speech acts.²⁶

²⁴ Deontic speech acts are discussed in detail by Lyons (1977, 823–41).

²⁵ Of course, all speech acts that are connected to deontic possibility or to deontic necessity count as deontic speech acts. Thus, in addition to those mentioned above, further examples of deontic speech acts include *Elmehetek este moziba?* 'May I go to the cinema tonight?' and *Muszáj este elmennem moziba?* 'Do I really have to go to the cinema tonight?'; the former is an instance of asking for permission, and the latter is an instance of asking for exemption from an obligation.

²⁶ The problem of deontic speech acts is made theoretically interesting by the fact that deontic logic was originally a kind of action logic, that is, it took speech acts

In the case of some verbs, deontic modality in an utterance always expresses a deontic speech act; in other words, these utterances are always used in speech situations where 'deontic' conditions are all met. This is exemplified in (19a–b).

- (19) (a) *Elmehetsz.* 'You can go now.'
 (b) *Elmehetek?* 'Can I go now?'

It is to be added here that deontic modality, in the case of action verbs, cannot in general be told apart from other kinds of modality at the semantic level. The utterance in (18a), for instance, may also mean that the listener will have an opportunity to go to the cinema (circumstantial modality, cf. Kiefer 1981). Given that deontic speech acts are directed at actions, a modal utterance containing a state verb like *Okos lehetsz* 'You may be clever' cannot be deontic. In general, however, the various kinds of modality can only be told apart on the basis of the speech situation.

But the morphopragmatics of the modal suffix *-hat/-het* is by no means exhausted by deontic speech acts.

Although the invariant lexical meaning of *-hat/-het* is 'possibility', in some circumstances it may also express 'necessity'. Here are a few examples:

- (20) (a) *Nemcsak a rangnak, hanem a tanult foglalkozásnak is búcsút mondhattak.*
 'They had to say goodbye not only to their position but also to their profession.'
 (b) [...] *legalább öt évig dolgozhatom éjjel-nappal, amíg kiheverem valahogy ezt a sikert.*
 '[...] I will have to work night and day at least for five years before I recover from the effects of this success.'
 (c) *Elrontottam, most kezdhetem az egészet előlről.*
 'I've messed it all up, now I have to start it all over again.'

In all three utterances, we have to do with necessity: the profession has to be given up, the speaker will have to work night and day, and

to be its starting points (Wright 1971). The intention that the various kinds of modality should be given a unified treatment was what led to the insight that deontic possibility/necessity and deontic speech acts have to be kept distinct (Kratzer 1978). The distinction between the two also entails that a deontic sentence may express, as an utterance, some other — not deontic — speech act. For example, the utterance *Este elmehetsz moziba, én vigyázok majd a gyerekekre* 'You can go to the cinema tonight, I will look after the baby' does not express the act of giving permission: it simply expresses a possibility.

he has to start it all over again. The suffix *-hat/-het* can be replaced by the appropriate form of the modal verb *kell* 'must, have to' without the meaning of the utterance being lost or altered. What causes that change in the meaning of *-hat/-het*? Observe that all three utterances refer to states of affairs that are in some sense negative: in (20a) people were deprived of their positions and professions; in (20b–c), negative context is signalled by *kihever* 'recover from the effects of' and by *elront* 'mess up', respectively. The negative context restricts the number of possibilities to just one. But if we can only choose to do a single thing, this amounts to necessity. This is obviously not logical necessity but rather deontic necessity or circumstantial necessity (one that is dictated by the circumstances).

If we remove the negative context from (20a–c), the possibility cannot be interpreted as necessity in them. The utterances below simply refer to possibility:

- (21) (a) Időben érkeztek, s így búcsút mondhattak barátaiknak.
'They came in time, so they could say goodbye to their friends.'
(b) Hála Istennek, még legalább öt évig dolgozhatom.
'Thank God, I can go on working at least for five more years.'
(c) Kezddhetem bontani a falat?
'Can I start demolishing the wall?'

As in other languages (e.g., German, English), modal forms of *kér* 'ask for' and *kap* 'get' in the indicative or in the conditional can be used to express polite requests.

- (22) (a) Kérhetek/Kérhetnék még egy szelet kenyeret?
'Can I/Could I ask for another slice of bread?'
(b) Kaphatok/Kaphatnék még egy csésze kávé?
'Can I/Could I get another cup of coffee?'

It is only first person forms (singular and plural) of these verbs that can fulfil that function. Though other verbs, too, can be used with the suffix *-hat/-het* in polite requests (e.g., *Megkérdezhetném, hogy hány óra van?* 'Could I ask you to tell me the time?', *Kinyithatnám az ablakot?* 'Could I open the window?'), the forms of the verbs *kér* 'ask for' and *kap* 'get, obtain' in examples (22a–b) are fully conventionalised means of conveying polite requests. In other words, the pragmatic meaning is not deducible from the semantics of these forms. This, in turn, means that polite requests cannot be connected with the rule introducing the modal

suffix; consequently, it cannot belong to morphopragmatics. (22a–b) are conventionalised polite formulae that lexical pragmatics is entitled to account for.

The modal forms of some verbs, including *mond* ‘say, tell’, *tud* ‘know’, *akar* ‘want’, *lát* ‘see’, *gondol* ‘think’, *csinál* ‘do’ have a very rich pragmatics. Let us see a few examples.

- (23) (a) Hát akkor hogyan mondhattad a többi embernek, hogy csak az összetartásban az erő?
‘How could you tell the others then that unity was strength?’
(b) Hogy mondhatsz ilyet, Rózsika?
‘How can you say that, Rosie?’

Uttered with an exclamatory intonation, *hogy(an) mond+hat* ‘how say/tell+can’ is a conventional formula of reproach, hence its description is the task of lexical pragmatics rather than that of morphopragmatics. The utterances below are different:

- (24) (a) Mondhatták az öregasszonynak, hogy a fia rossz, ő tudta, hogy jó.
‘In vain did they tell the old woman that his son was bad, she knew he was good.’
(b) Mondhatta ő, hogy beteg, nem hittek neki.
‘In vain did he say he was ill, nobody believed him.’

In these utterances, *mondhat* ‘say/tell+can’ is equivalent with *hiába mond* ‘say/tell in vain’, that is, (24a–b) mean the same as (25a–b):

- (25) (a) Hiába mondták az öregasszonynak, hogy a fia rossz, ő tudta, hogy jó.
‘In vain did they tell the old woman that his son was bad, she knew he was good.’
(b) Hiába mondta, hogy beteg, nem hittek neki.
‘In vain did he say he was ill, nobody believed him.’

It appears that this interpretation is possible if two conditions are met: (a) the verb *mond* ‘say, tell’ has to carry main stress, and (b) the context of the utterance has to be negative. If, for instance, main stress falls on the personal pronoun, the utterance turns into one with a deontic (or epistemic) meaning:²⁷

²⁷ It should be noted that if the subject *ők* ‘they’ is pronounced with contrastive topic intonation and *mondhatták* ‘could tell’ with focus intonation, only the deontic reading is available.

- (26) (a) *Ők mondhatták az öregasszonynak [...]*
 'They were allowed to tell the old woman [...]' / 'It may have been them who told the old woman [...]'
- (b) *Ő mondhatta [...]*
 'He was allowed to say [...]' / 'It may have been him who said [...]'

The 'say/tell in vain' reading can only come about if the context precludes the deontic meaning. In (27a–b) the negative context is not there, hence the deontic reading is not excluded:

- (27) (a) *Mondhatták az öregasszonynak, hogy a fia rossz, ő nem sértődött meg.*
 'They could tell the old woman that his son was bad, she was not offended.'
- (b) *Mondhatta, hogy beteg, nem bántották érte.*
 'He could say he was ill, nobody discomfited him for that.'

The utterances in (27a–b) also show that the required negativity of the context is not simply based on the presence of a negative particle or other lexical means of negation. The listener can only take the context to be sufficiently negative on the basis of his knowledge of the world and of the lexical meanings included in the utterance.

The modal verb forms in the examples below play a role similar to that of pragmatic particles:²⁸

- (28) (a) *Szép divat, mondhatom.*
 'A nice custom, I daresay.' (= I think it is dreadful.)
- (b) *Gondolhatjátok, nem volt se ebéd, se semmi.*
 'You can imagine, there was no lunch, nothing.'

Mondhatom 'I can say so' (in the ironical sense seen in (28a)) has been lexicalised in this form, other inflected forms of *mond* 'say, tell' (like *mondhatjuk* 'we can say so') do not have a similar function. Therefore, the interpretation of this use of *mondhatom* cannot be a morphopragmatic problem; it has to be accounted for by lexical pragmatics. On the other hand, *gondolhatjátok* 'you-pl. can think' is not a lexical item since *gondolhatod* 'you-sg. can think', *gondolhatja* 'you-sg. can think' (polite address), *gondolhatják* 'you-pl. can think' (polite address) also have the same function. With these forms, the speaker wants to prepare the listener to some consequences that seem to be natural given

²⁸ The term 'pragmatic particle' is used here in the sense of Abraham's and others' 'discourse particle' (Abraham 1991).

what preceded. The speaker wants to involve the listener in drawing the appropriate conclusions.

This concludes our survey of the major pragmatic meanings of the modal suffix *-hat/-het* that can be spotted in our corpus. In addition to speech acts based on deontic possibility, *-hat/-het* can express deontic necessity as well as lack of possibility (cf. *hiába* 'in vain'+ *V*), and it can occur with some forms of *gondol* 'think' by which the speaker wants to prepare the listener to some consequences. Epistemic *-hat/-het* does not have a special pragmatic meaning. Semantically, the meaning of the suffix is clear: it expresses possibility in all cases. All that is added by the speech situation belongs to the realm of pragmatics.

5. Summary

In this paper, I have discussed some pragmatic aspects of Hungarian morphology. The subject-matter of morphopragmatics is the investigation of types of pragmatic meaning that can be seen to be connected with morphological rules. My assumption was that semantics comes first; pragmatic meaning can be derived on the basis of semantic meaning, the wider sentential context, and the speech situation. Following Dressler–Merlini-Barbaresi (1993), I have drawn a distinction between lexical and morphological pragmatics. The former looks at pragmatic aspects of individual lexical items, while the latter investigates those of morphological rules. Therefore, the study of pragmatic aspects of lexicalised morphological derivatives is also part of lexical pragmatics. Pragmatic meaning primarily arises in cases of competing or non-prototypical morphological rules. Prototypicality has been defined on the basis of Dressler (1989). I have investigated the excessive, the diminutive suffix, and the modal suffix *-hat/-het* since all three of them exemplify non-prototypical derivation.

The excessive is semantically identical with the superlative that expresses the highest degree of the property denoted by the adjective; they only differ in terms of pragmatic meaning. Words that unambiguously determine (endpoints of) spatial order or temporal sequence are exceptional in that they are semantically ungradable, hence their superlative also carries an exclusively pragmatic meaning. The semantic meaning of the diminutive suffix is 'small, a little'; that meaning can be modified or added to by the speech situation, or even be turned into the feature 'insignificant' in the case of names of functions or occupations. The modal suffix *-hat/-het* semantically expresses possibility; utterances containing

it can be used to convey various speech act meanings or other pragmatic meanings. In all three cases, all that goes beyond semantic meaning due to the speech situation is the concern of pragmatics.

A pragmatic investigation of a number of other morphological phenomena of Hungarian is a task for future research.

References

- Abraham, Werner 1991. Discourse particles in German: how does their illocutive force come about? In: Werner Abraham (ed.): *Discourse particles*, 203–50. John Benjamins, Amsterdam.
- Crystal, David 1994. *An encyclopedic dictionary of language and languages*. Third edition. Penguin Books, London.
- Dressler, Wolfgang U. 1989. Prototypical differences between inflection and derivation. In: *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 42: 3–10.
- Dressler, Wolfgang U. – Ferenc Kiefer 1990. Austro-Hungarian morphopragmatics. In: Wolfgang U. Dressler – Hans C. Luschützky – Oskar E. Pfeiffer – John R. Rennison (eds): *Contemporary morphology*, 69–78. Mouton de Gruyter, Berlin & New York.
- Dressler, Wolfgang U. – Lavinia Merlini-Barbatesi 1993. *Morphopragmatics*. Mouton de Gruyter, Berlin & New York.
- Fónagy, Iván 1975. [A] hiperbola [Hyperbole]. In: István Király (ed.): *Világirodalmi lexikon* 4 [An encyclopaedia of world literature, vol. 4], 480–6. Akadémiai Kiadó, Budapest.
- Kearns, Kate 2000. *Semantics*. Macmillan, Houndmills & Basingstoke.
- Kecskés, István 2003. *Situation-bound utterances in L1 and L2*. Mouton de Gruyter, Berlin & New York.
- Kiefer, Ferenc 1981. What is possible in Hungarian? In: *Acta Linguistica Hungarica* 31: 147–85.
- Kiefer, Ferenc 1983a. A kérdő mondatok szemantikájáról és pragmatikájáról [On the semantics and pragmatics of questions]. In: Endre Rácz – István Szathmári (eds): *Tanulmányok a mai magyar nyelv szövegtana köréből* [Papers on the textology of present-day Hungarian], 203–30. Tankönyvkiadó, Budapest.
- Kiefer, Ferenc 1983b. Szemantika vagy pragmatika? [Semantics or pragmatics?]. In: *Nyelvtudományi Közlemények* 86: 5–22.
- Kiefer, Ferenc 1985. A *-hat/-het* képző jelentéséhez: az episztemikus *-hat/-het* [On the semantics of the modal suffix *-hat/-het*: Epistemic *-hat/-het*]. In: *Általános Nyelvészeti Tanulmányok* 16: 131–53.
- Kiefer, Ferenc 1998. Morphology and pragmatics. In: Andrew Spencer – Arnold M. Zwicky (eds): *The handbook of morphology*, 272–79. Blackwell, Cambridge MA & Oxford.
- Kiefer, Ferenc 1999. La modalité et la pragmatique. In: *Revue d'études françaises* 3: 25–31.

- Kiefer, Ferenc 2000. Jelentéelmélet [Semantic theory]. Corvina, Budapest.
- Kiefer, Ferenc – Mária Ladányi 2000. Morfoszintaktikailag semleges képzések [Morpho-syntax-neutral derivation]. In: Ferenc Kiefer (ed.): Strukturális magyar nyelvtan 3. Morfológia [A structural grammar of Hungarian 3. Morphology], 165–214. Akadémiai Kiadó, Budapest.
- Kratzer, Angelika 1978. Semantik der Rede: Kontexttheorie – Modalwörter – Konditionalsätze. Scriptor, Königstein.
- Lyons, John 1977. Semantics I-II. Cambridge University Press, Cambridge.
- Swart, Henriëtte de 1998. Introduction to natural language semantics. CSLI Publications, Stanford CA.
- Wright, Georg Henrik von 1971. Explanation and understanding. Cornell University Press, Ithaca NY.

Address of the author: Ferenc Kiefer
Research Institute for Linguistics
Hungarian Academy of Sciences
Benczúr utca 33.
H-1068 Budapest
Hungary
kief@nytud.hu

WHAT DISCOURSE GOALS CAN BE ACCOMPLISHED BY THE USE OF HYPERBOLE?

ATTILA L. NEMESI

Abstract

Although hyperbole is a ubiquitous means of discourse, its role in interpersonal rhetoric has been examined to a much lesser extent than that of metaphor or irony. This paper investigates what discourse goals can be fulfilled by hyperbole, using conversations from some classic Hungarian films as the data. The reason why film conversations were selected is that the knowledge of the story and the transparency of the characters' intentions make the understanding of communicative motives easy. Besides, the situations in feature films are very similar to spontaneous everyday interactions. Analyses demonstrate that hyperbolic utterances convey the speakers' attitudes, either real or only presented, towards the topic of conversation. According to the social psychological laws of public behaviour, the expression of emotional relation or attitude is mostly subordinated to the speaker's attempt to construct an intended impression on conversational partners. Thus, the use of hyperbole has two main goals: to express emotions and to reach a desired self-presentation.

1. Introduction

From ancient rhetoric to present-day study of language use and comprehension, **hyperbole** (also called **overstatement** or **exaggeration**) has been seen as one of the most prominent figures of speech. Since it is a frequent phenomenon not only in oratorical or artistic texts but in familiar conversation as well, and its usage (that is, the augmentation of the intensity of real state of affairs to extremity) differs from the communication of literal meanings, it also falls within the competence of pragmatics. Grice's classic (1975) article posited that figures such as hyperbole, irony, metaphor, and meiosis (or litotes) are cases of flouting the Maxim of Quality: the hearer can restore the meaning of the literally false proposition by calculating an appropriate implicature. It is not obvious, however, what kind(s) of social goals underlie the generation of such implicatures for it can be supposed that the shift from maximally effective, direct broadcast of meaning is explained by some kind(s) of interactional intentions.

In the present paper, I aim to account for the role of hyperbole in discourse combining the insights of the Gricean theory of conversational implicature and the theory of impression management developed in social psychology. I assume that the conversational partner, facing an exaggeration, does not only recognize the violation of the Maxim of Quality but he/she also conveys certain facets of the speaker's face (see Goffman 1955; Brown-Levinson 1978; 1987; Tracy 1990; Mao 1994) and his/her relation to the topic of conversation. In other words, the speaker chooses hyperbolic statements to form a desired impression of his/her face and his/her attitude towards the topic of speech in the hearer.

Both traditional rhetoric, stylistics, and the much younger empirical psycholinguistics and pragmatics, have greatly contributed to reveal the background of the usage of hyperbole. As basic preliminaries, these contributions will be detailed in section 2. Then, in section 3, I will demonstrate that the role of hyperbole in discourse can be successfully investigated only by means of an analysis that takes into consideration the context in which the hyperbolic utterance occurs. In section 4, I will introduce the notion of self-implicature as the cornerstone of a complex model I will elaborate on within the field of social psychological pragmatics (see Muntigl-Turnbull 1998, 226). This model will be tested by further examples in section 5.

2. A review of literature

2.1. Figurative language and interpersonal rhetoric

The strict separation of linguistic tools employed for literary expression or public persuasion and those used in casual conversation cannot be held any more, as some of the figures of speech that have been traditionally classified within the scope of rhetoric appear frequently in the situations of everyday communication. Their pervasiveness in such contexts also indicates that the need for efficiency can be recognized not only in consciously rhetorized texts but in interpersonal rhetoric as well (Leech 1983, 15). The recognition of this fact is by no means new in linguistics. In the early 20th century, Charles Bally (1913, 32) portrayed language as an arm: the speaker utilizes it in order to force his/her own thoughts upon the conversational partner. Thus, the language of communication is driven by an instinctive rhetoric, which makes its own use of strategies of eloquence; or rather, it is eloquence that once borrowed

them from conversation. There is no absolute consensus about the exact number of (and clear-cut distinction concerning) these strategies within the literature. But it is agreed that at least metaphors (*My office was a bedlam today*), irony (*Thanks for your help!*—when a meddlesome neighbour breaks the speaker's precious Chinese vase while packing), hyperbole (*I have a million duties before noon*), litotes (*Punctuality is not your best virtue*—when the partner arrives too late to the meeting again), simile (*This plum is as sweet as honey*) and rhetorical question (*Who do you think you are?*) have as important a role in ordinary conversation as in public and literary registers (see, e.g., Szathmári 1958; Lausberg 1960/1998; Grice 1975; Leech 1983; Brown–Levinson 1978; 1987; Fogelin 1988; Sperber–Wilson 1990; Kreuz–Roberts 1993; Gibbs 1994; Fónagy 2001).

Kreuz et al. (1996) assessed the relative frequency of these forms of nonliteral language in a randomly selected, 96-page corpus of contemporary American short stories, containing about 38,000 words. They found that hyperbole (accounting for 27% of the forms of figurative language in the corpus) was a close second after the first ranked metaphor (29%), highly surpassing the rate of its logical opposite, litotes (3%), for example. Although it can be suspected that these statistics are not universal but dependent on language and genre, the authors rightly mention that the phenomenon of such a frequent occurrence of hyperbole should have attracted more attention than it is suggested by the low number of relevant publications and relatively few theoretical developments.

2.2. Describing the phenomenon of hyperbole

At the level of literal meaning the hyperbolic linguistic expression either makes the sentence unequivocally false (e.g., *There were countless applicants for the job*—since the applicants could have been counted) or difficult to decide its truth value because of the additional emotive content (e.g., *Your performance was frenetic*—for there is no objective scale in this respect, other judges can have different opinion of that). The quantitative augmentation of real states of affairs (unfortunately, hyperbole is not defined more exactly in the literature) makes big things bigger, and small things smaller. Thus, diminution is also a kind of hyperbole (e.g., *There's absolutely nothing on the telly this evening*), although some scholars discuss it separately from augmentation (cf. Szathmári 1958, 148). The saliency and evocative effect of hyperbole make

our attention focus on the manner of the linguistic performance and are the source of its expressivity (see Bally 1913, 26–8; Péter 1984, 231–3; Péter 1991, 40–4). As a word figure, universal quantifiers (*always, every, nobody*, etc.), superlatives of adjectives or adverbs, repetition (*a long long way, very-very difficult*, etc.), (usually round) numerals and evaluative-qualifying lexemes (*abominable, brilliant, milksop, stony-hearted*, etc.) offer a possibility of ‘lying’, claiming literally implausible extremities (Lausberg 1960/1998, 263–4, 410–1; Fónagy 1975, 481–2; Péter 1991, 65–70). As a thought figure, the structure of words, the whole sentence, or more than one sentence can express such vertical gradations (e.g., *The man who will make me gobble up mushrooms is not yet born*—quoted by Fónagy 2001, 219 from the film *Buffet froid* by Bertrand Blier, 1979). Another peculiar aspect of hyperbole is that it tends to co-occur with other forms of figurative language (cf. Szathmári 1958, 146; Lausberg 1960/1998, 263–4, 410–1; Kreuz-Roberts 1995; Kreuz et al. 1996, 92; Kreuz et al. 1998, 93; Colston-Keller 1998), usually with simile, as in (1a), metaphors, as in (1b), irony, as in (1c), and idioms, as in (1d):

- (1) (a) You have as many nice clothes as stars in the sky. Let us not buy another one.
- (b) You are my sunshine.
- (c) Wonderful! ... — says a disappointed supporter when his favourite team, which is in disadvantage, gets another humiliating goal.
- (d) His eyes nearly popped out of his head.

Szathmári (1958, 146) explains the stylistic effect of hyperbole in the following way: every overstatement is accompanied by the recognition that there is another linguistic sign for expressing the exaggerated concept, which is more adequate concerning its reflection to reality, but the speaker wants to communicate more than that just for the effect. The question remains what can be understood as ‘effect’ in stylistic studies. Referring to the results of Sandig (1986), Tolcsvai Nagy (1996, 89, 265) defines it as an emotional and/or sensory response generated in the hearer, which derives from the recognition of the relation created by the unification of expectations, comparing with style types and style attribution. In what follows, I will attempt to systematically investigate for what kind(s) of (social psychological) pragmatic effects the speaker prefers a hyperbolic expression to other linguistic means which reflect reality more adequately.

2.3. The role of hyperbole in speech

Building on Lausberg's (1960/1998, 263–4, 410–1) standard work as well as other sources, Fónagy's (1975, 482–4) painstaking dictionary entry focuses on literary/rhetoric rather than everyday uses of hyperbole. However, his observations are really valuable for the present argumentation. First, according to Fónagy, hyperbole is one of the characteristics of excited mental state: it can reflect anxiety or strong emotion resulting from losing self-control. Second, similarly to such emotional agitation, the long-lasting thrill of love (which deserves separate mention) makes the speaker distort the perspective. Third, the consistent use of hyperbole renders speech dramatic, solemn, and thus idealizing, making the style too lofty for ordinary use. Fourth, the overuse of dramatic hyperbole and the contrast of a petty topic with a solemn form can turn the emphatic effect backwards (see the genre of comic epic). Fifth, the desire to faithfully present the original event and to be expressive can stimulate the speaker to augment the intensity of words. Sixth, rhetorical hyperbole serves the goal of persuading the audience: the rhetor, on the one hand, can impede the potential objections by exaggerating the phenomena, and, on the other, hyperbolic polite forms help to get positive feedback by dispraising the speaker and praising the hearer. Seventh, the demonstrative overstatement of politeness and homage verges upon irony: it can express sarcasm, antipathy, or scorn just like dramatic style. Finally, as a feature of style, hyperbole can characterize dramatic persons. For instance, Molière wittily parodies the female speech of the 17th century, especially the language of French salons in his *Learned Ladies* with giddy hyperboles spoken by his characters (*Pleasure will kill me, You can feel a thousand sweet thrills while listening*, etc.). Finally, Fónagy (1975, 484; 2001, 219) does not fail to note that some performances of hyperbole are genre-specific: it is a compulsory stylistic means of naive epic and folk-tale among literary genres, and it is common in popular speech, generally. Other examples from contemporary media culture can be easily added to this brief list (e.g., the language of advertisements, sports broadcasts, or TV shows).

Since the understanding of nonliteral meanings is closely related to the recognition of the speakers' intention, psycholinguistic research has also been conducted in order to examine the discourse goals or goal taxonomies that underlie the usage of figuration. Roberts and Kreuz (1994) asked American college students to provide reasons why an individual

might employ a particular figure of speech on the basis of a definition and 10 examples. Based on the 134 acceptable responses, the hypothetical goals were classified according to 19 easily identifiable categories, out of which hyperbole was mostly mapped to “clarifying” (!), “emphasizing”, “being humorous”, and “adding interest” (of course, other figures of speech were associated with other constellations of communicative goals). The most frequently mentioned goal “to clarify” is somewhat surprising given the “reduced truth value” of hyperbole (Fónagy 2001, 218). As Roberts and Kreuz do not provide us with the list of their examples, we are left to rely on the comments of Kreuz et al. (1998, 94): the feelings or attitudes of the speaker and his/her relation to the information communicated may be clarified by using exaggeration. The utterance in (2), for example, informs us about a certain event (the national team lost a match), but the speaker’s emotional reaction to the event (disgust or disillusionment) is also made clear enough, owing to the hyperbole:

(2) I’ve just watched the Hungarian football team lose for the thousandth time!

Hyperbolic speech may have other functions in specific contexts. Sell et al. (1997) videotaped conversations between preschool children and their parents in free-play situations. They found that the parents used dozens of hyperboles (more than metaphors but less than rhetorical questions or idioms). As it was expected, adults mostly used this linguistic means to encourage children in their play activities (e.g., *We can fix anything, can’t we?*) and to express positive evaluation (*Wow, that was perfect!*, *The tallest bunny I’ve ever seen*, etc.).

Colston and Keller (1998) and Colston (1997) concentrate on unexpected social episodes when overstatement, understatement, and irony express surprise (e.g., *There is not a single person in line here*—when two women walk into a theatre known for very long queues, but as they enter, they see only two people queuing up). Being psycholinguists, Colston and Keller are primarily interested in which figure is the most effective and how people comprehend them. Hence their written scenarios contain pre-constructed (supposedly fictitious) examples, out of which for our purposes it is worth noting the bare fact that hyperbole sometimes is a verbal reflection of surprise when events do not turn out as previously expected.

2.4. The pragmatic perspective

Following Grice's (1975, 53) theory of conversational postulates and implicatures, mainstream pragmatics has concerned hyperbole and other common figures of speech as a flout exploiting the first maxim of Quality ('Do not say what you believe to be false'). Exploitation means that the speaker deliberately does not observe a maxim, without wanting to suspend cooperation or to mislead the hearer. Instead, he/she wishes to communicate something that is not included in the literal meaning of the utterance but can be inferred from the conventional meaning, assuming the obviously cooperative attitude of the speaker, and using information from the (not expounded) context or background knowledge. Still, if, according to the aim of the present paper, we want to know what kind(s) of implicit information (implicatures) can be inferred from exaggerations, Grice's own example, in (3), does not serve as a good starting point for want of explanatory glossing:

- (3) Every nice girl loves a sailor.

Since we do not know the context in which utterance (3) is (or can be) said, the content of the implicature is not obvious at all (it may not be by chance that Grice, untypically, failed to detail it). For instance, one might argue that *every* should be simply replaced by *many*, and the implicature is worked out. But let us consider another real-life context: if the speaker is a sailor and the hearer is a nice girl, then (3) can also implicate that the girl should like the speaker. This is the indirect message that seems to be the intended one.

Leech (1983) goes one step further when he posits maxims of politeness, whose clash with the Gricean maxims may lead to the modification of direct strategies, as long as it does not require too much effort from the partner. When discussing the interpersonal rhetorical role of hyperbole, Leech, on the one hand, mentions the enhancement of politeness (e.g., *What a marvellous meal you cooked!* — attributed to his Approbation Maxim, favoured in praising others), and, on the other hand, he introduces a new principle, the Interest Principle, assuming that idiomatic hyperboles that occur frequently in ordinary conversation and the preference of extremities on a scale of news value can and should be derived from it (Leech 1983, 145–7):

- (4) Say what is unpredictable, and hence interesting.

The Interest Principle encapsulates the common experience that people prefer interesting conversations with some novelty to boring interchanges, monotonous in both style and content. Nevertheless, exaggeration used for creating interest has its limitations as well. In this way, the Maxim of Quality and the Interest Principle are in conflict all the time: sometimes the former, sometimes the latter wins their perpetual tug-of-war, but it is the Maxim of Quality as a keystone of rational behaviour and communicative ethic that is a wider social expectation.

Perhaps more influential than Leech's, Brown and Levinson's politeness theory (1978, 222–5; 1987, 217–20) quite irregularly categorizes hyperbole and litotes as flouts of not the Quality but the Quantity maxim ('Do not make your contribution either more or less informative than is required'): the former is too informative while the latter is not informative enough compared to the real state of affairs. There is no need to accept unconditionally this view (at least for hyperbole) in order to recognize the politeness of derived implicatures (or rather, the face-saving intention; see below):

- (5) (a) There were a million people in the Co-op tonight!
 (b) I tried to call a hundred times, but there was never any answer.

Exaggerating the overwhelming circumstances, (5a) is an excuse offered as an explanation for being late, whereas (5b) could function as an apology or decline of responsibility for not getting in touch, indicating that the speaker tried hard not to hurt the partner. According to Brown and Levinson, overstatement as a strategy of politeness tends to manifest itself when the risk of face loss is relatively high; that is, what is to be said is opposed to the public self-image of the partners and their expectations originating from their face-wants, therefore it is worth leaving an 'out' (a defensible interpretation) for mitigating the offence. The offence is the fact of being late in (5a) and the omitted phone call in (5b).

However, hyperbole is such a flexible figure of speech that we cannot be satisfied with the above classification of functions, even within the realm of discourse politeness. In the strategy network of Brown and Levinson's theory, there is a branch which ends in the exaggerative presentation of interest, approval, or sympathy, fulfilling the partner's desire that his/her favoured thoughts, acts, possessions should be admitted by the others (1978, 109–11; 1987, 104–6):

- (6) What a fantastic garden you have!

Since Brown and Levinson proposed the flouting of the Maxim of Quantity instead of the Maxim of Quality, let us add that Grice's categories of Relation ('Be relevant') and Manner ('Be perspicuous: Avoid obscurity, ambiguity, etc.') are also capable of being exploited by hyperbolic utterances, although the literature seems to disregard these eventualities:

- (7) (a) A: Mrs. X is an old bag.
 B: ((after a moment of appalled silence))¹ The weather has been quite delightful this summer, hasn't it?
 (b) It is awfully nice of you to take care of me all the time.

Example (7a), again, is taken from Grice (1975, 54) and illustrates the shift of topic, resulting from the recognition of a conversational inaptitude (flouting of the Maxim of Relation). But here the contribution of the hyperbole to the violation of relevance maxim seems to be negligible. By contrast, (7b) is ambiguous due to the 'frightening' exaggeration *per se* for the hearer as long as he/she cannot decide whether the communicator speaks seriously or ironically. If this ambiguity is generated on purpose, an implicature of Manner arises.

3. The concept of self-presentation

Considering the several approaches applied in previous literature, and keeping in mind the multiple face of conversational exaggeration as an interpersonal rhetorical figure of speech, it may seem that a theoretical framework making the identification of communicative goals of hyperbole simpler and more elegant can hardly be developed. However, it is a fact that the problem can be ascribed, at least partly, to the isolation of the—quite often invented—examples and the narrowing of context, drawing conclusions either from the opinions of informants as Roberts and Kreuz (1994) or from particular utterances as Grice (1975), Leech (1983), and Brown–Levinson (1978; 1987).

¹ The transcript symbols used throughout this paper are common in conversation analysis research (cf. Atkinson–Heritage 1984, ix–xvi). Double parentheses enclose certain meaningful (mostly nonverbal) details of the scene, intervals in the stream of talk are timed in tenths of a second and inserted within parentheses, a colon indicates an extension of the sound or syllable it follows (more colons prolong the stretch), and emphasis is marked by underlining.

Therefore, in this section, I will turn to a controllable linguistic example for methodological reasons, to a scene from the first widely known product of the Hungarian feature film industry, *Hyppolit, a lakáj* (Hyppolit, the butler) made in 1931. Since the story is well-known, the investigation of the context and the social motives of the characters do not cause any trouble when interpreting the conversation (and the italicized idiomatic hyperbole) in (8). Clearly, the following part of a dialogue is not spontaneous. However, it is very similar to real-life exchanges, thus making it possible to be investigated, just like sequences of natural conversation, from various aspects mentioned in the literature review:

- (8) MR. SCHNEIDER: Te, mama, ki ez a (.2) Hyppolit?
 'Hey, Mum, who is this (.2) Hyppolit?'
 MRS. SCHNEIDER: Hh el is felejtettem neked mondani, hogy felvettem egy inast...
 'Hh I forgot to tell you that I hired a butler...' (.8)
 MR. SCHNEIDER: ((astonished)) Inast?
 'A butler?'
 MRS. SCHNEIDER: Hh igen... Meg akartalak lepni vele...
 'Hh yes... I wanted to surprise you...'
 MR. SCHNEIDER: ((angrily)) Sikerült!
 'You succeeded in that.'
 MRS. SCHNEIDER: Remélem, papa, nem haragszol.
 'I hope, Dad, that you are not angry.'
 MR. SCHNEIDER: ((ironically)) De::hogy haragszom. Mért haragudjak? Csak úgy kirúgom, hogy a... a lába nem éri a földet!
 'I am not angry at all. Why should I be angry? I will just kick him out such that his feet will not touch the ground!'
 MRS. SCHNEIDER: De::hogy rúgod. Szépen fölveszed a kabátodat, mert ingujjban nem fogadhatod. Huszonhét évig szolgált egy grófi háznál.
 'You won't. You will put on your coat because you cannot receive him in a shirt. He worked for a count for 27 years.'
 MR. SCHNEIDER: Hát nálunk nem fog olyan sokáig szolgálni.
 'He will not work for us for that long.'
 MRS. SCHNEIDER: De papa...
 'But Dad...'
 MR. SCHNEIDER: Csak bízd rám!
 'Just leave it to me!'

Gloss: Mr. Schneider is a petty bourgeois turned transport entrepreneur. His wife, a woman with an air of snobbery, persuaded by the employment agent and without asking Schneider, tries to transmute her household

into something more distinguished than it actually is by hiring Hyppolit, formerly a butler with the family of a count. The exchange cited in (8) occurs at the dinner table just before Hyppolit's entry. We see that Schneider does not want to hear about the idea: he insists on the old way of life that he is accustomed to, and, in a firm tone of voice he tells his defensive wife about his dislike of her plan because of the offence on his authority (his wife hired Hyppolit without his consent). Some moments later, when the elegant Hyppolit, with an excellent style, enters personally, Schneider turns into a timid petty bourgeois, his behaviour changes dramatically: forgetting his former vigour, he tries to accommodate to the expectations of the aristocratic butler, and finally, he accepts his hiring, giving in to his wife's will.

What does Schneider communicate when he says he "will kick him out such that his feet will not touch the ground"? Since in Hungarian this is an exaggerative idiom (cf. (1d)) that states a literally impossible act (we think this on the basis of our world and linguistic knowledge), at first, we have to find another version of this expression which is more adequate in its relation to reality (cf. Szathmári 1958, 146), for example: he will sack Hyppolit, he will not employ him. However, the informational content of the utterance is not yet totally exploited. The next step is the emotional load (discussed in Lausberg 1960/1998; Fónagy 1975; Fussell-Moss 1998; etc.)—recall that it was a concomitant of the hyperbole seen in (2), too—: Schneider is annoyed by the snobbery of his wife and by Hyppolit's unexpected appearance. That is why he overdoes the way he will treat Hyppolit. The manifestation of an emotionally accentuated, vigorous attitude is at the same time a defensive effort to repair the challenge of the role 'master of the house' on the level of self-presentation.

This essential self-presentational layer of meaning generation demands a social psychological extension of the traditional linguistic perspective while examining the inferential content of an utterance in its entirety. Thus, before proceeding any further with the discussion, we need to shed light on what is included in the concept of self-presentation in order to integrate it into a complex social psychological pragmatic model.

Self-presentation is the pervasive attempt to control self-relevant images that are projected in social interactions (Schlenker 1980, 6; Tedeschi 1981, 3; Leary 1995, 2). While some authors use the terms *self-presentation* and *impression management* interchangeably (Leary-Kowalski 1990; Leary 1993; 1995), others make a distinction between them, emphasizing that impression management involves the goal-directed control of the

outer image of not only the actor but that of other persons, associations, entities, and ideologies as well; hence, impression management is a broader and more encompassing notion than self-presentation (Schlenker 1980; Schneider 1981). A third technical term also frequently employed for the description of approximately the same social phenomena is *face-work*, which represents all kinds of behaviour consistent to either the speaker's or the hearer's face (Goffman 1955; Brown-Levinson 1978; 1987; Penman 1990; Tracy 1990; Nwaye 1992; Mao 1994; Wood-Kroger 1994; Muntigl-Turnbull 1998).

The first seminal promoter of research on self-presentation, Goffman (1955; 1959) follows the spiritual heritage of sociologically anchored symbolic interactionism when he gives a purely external characterization of the self as a set of faces or images originating not from personal traits but the ritual order of public encounters. For him, faces are positive social values or approved social attributes a person effectively claims for himself/herself by the line others assume he/she has taken during a particular contact (1955, 213). However, in the flow of symbolic communication participants have to constantly confront the danger of being in the wrong face, being out of face, or losing face. To prevent these embarrassing situations, every community develops a set of face-saving acts, which, as mentioned earlier, is interpreted by Brown and Levinson (1978; 1987) as the repertoire of (linguistic) politeness. An important difference is that Goffman concentrates on the performance of the actor, whereas politeness theory focuses primarily on the face wants of the hearer (Penman 1990; Tracy 1990; Wood-Kroger 1994). In addition, Brown and Levinson (1978, 66–9; 1987, 61–4) give some individualistic content to the Goffmanian dramaturgical self, which does not meet the values of every culture (Nwaye 1992; Mao 1994). In contrast with this, current research into self-presentation (1) regards facework not only as a defensive action directed towards the face needs of the hearer (Arkin 1981; Tedeschi-Norman 1985; Penman 1990); (2) stresses the interplay of private self-processes and interpersonal determinants in impression management (Schlenker 1985; Baumeister 1986; Leary-Kowalski 1990; Leary 1993); and (3), besides the institutionalized roles traced back to the closeness of the social structure and the rituality of interaction, allows for constructing individual faces or self-identification, which involves all the processes, means, or results of showing oneself to be a particular type of person, thereby specifying one's identity (Schlenker 1986, 23).

Adopting Leary's (1993; 1995; Leary-Kowalski 1990) in-depth conceptualization, self-presentation can be seen as the consequence of three discrete psychological processes that include impression monitoring, impression motivation, and impression construction. Impression monitoring is largely determined by the state of self-awareness: the more aware people are of their outer social image in a given situation, the more probable they will consider the self-presentational implications of their actions. The high or low level of average self-consciousness has a bearing upon personal characteristics as well. Among situational components, derailed interactions immediately draw attention to the face of the actor. Jones and Pittman (1982, 234) discuss some of the settings in which impression monitoring (and, therefore, self-presentation) is absent or minimal: (1) high task involvement, physical or intellectual challenge, (2) purely expressive behaviour (expression of anger, joy, enthusiasm, etc.), (3) a large class of overlearned, habitual social interchanges, and (4) authentic self-disclosures (e.g., therapy sessions, encounter groups, and intimate relationships). We have to say, then, that when one of the above settings forms the backbone of the context, the use of hyperbole does not necessarily represent an intention of self-presentation (albeit a non-intended secondary impression can be evoked in the hearer), but in every other case the possibility of strategic facework is maintained.

Impression motivation is strongly but not directly connected to impression monitoring. In Leary's view, it depends on three factors, namely the perceived goal-relevance of impressions, the value of the person's desired goals, and the potential discrepancy between desired and current images. For instance, Schneider is likely to be oriented to use a vigorous tone of voice in (8) because of the third motive: he feels that his face is threatened before his wife's eyes, who shows less respect to him than he would desire as her husband.

Impression construction that calculates what kind of impression could elicit the desired feedback from the partners is subsumed by five antecedents. Self-concept and desired identity images represent the considerations of our private self: people prefer suggesting impressions which match how they see themselves, and generally, it is easier and more rational to act in this manner than showing something different than what we really are or want to be like. The remaining determinants of impression construction (role and normative constraints, target values, and current or potential social image) are interpersonal in nature: expectations of peers and the structure of society give content to face, just like internal

features do. Of course, the face that Schneider tries to construct and assure for himself in his wife's eyes is composed of these factors, too.

4. Self-implicatures: a complex social psychological pragmatic approach

In a previous paper, referring to other relevant works, I argued that within the multiple message of linguistic communication not only factive or objective but subjective or self-content should be observed as well (Nemesi 2000, 434–5; see also Németh T. 2003; 2004 about rational and interpersonal principles of the communicative use of language for a similar reasoning). Hence, conversation includes information about the topic of speech on the one hand, and information about the selves of the communicators on the other. The exchange of information about the topic of speech is regulated by maxims of rationality (à la Grice 1975) as opposed to symbolic signs concerning the selves of the interactants, whose main motive is what I call the strategy of linguistic self-presentation: in verbal interactions, normally, people try to present themselves in such a way that they would like to be seen (Nemesi 2000, 426).

As for implicatures, Grice does not mention self-implicatures: only objective implicatures occur in his *Logic and conversation*. Consider, for example, the following:

(9) A: Smith doesn't seem to have a girlfriend these days.

B: He has been paying a lot of visits to New York lately.

In (9), according to Grice (1975, 51), B implicates that Smith has, or may have, a girlfriend in New York, that is why he often goes there. (It is interesting that Grice does not allow for other potential implicatures—for instance that Smith works a lot, and has to perform professional tasks in New York, and therefore he does not have enough time to maintain a relationship.) Three full stops in writing or intonation and additional nonverbal cues in speech can mark the presence of the unsaid thought, but without these it may be the case that B does not implicate anything, he/she only continues the conversation. Anyhow, it is not questionable that the interpretation preferred by Grice covers an objective implicature: the conversation is about Smith's private life, and B's indirect allusion adds something to this topic. A self-implicature would be found if we could suppose (knowing A, B, and the context of the exchange more

deeply) that B represents his/her initiation with the implicature or tries to establish intimacy by virtue of a gossip, or rather, that he/she wants to make the conversation (and thus, himself/herself) more interesting, etc.

In fact, self-implicatures were discovered by politeness theorists, even if the term is not used by them. While Leech (1983, 131–51) describes, among other directions of interpersonal rhetoric, the minimization of benefit and praise of self, and also the mitigation of antipathy and disagreement towards the partner in his maxims, Brown and Levinson (1978; 1987) see politeness as saving of faces; thus, any politeness implicature can be construed as a face-saving implicature. Self, face, and impression management (or self-presentation), nonetheless, are social psychological concepts; linguistics does not have to account for them, just like social psychology does not examine the layers of linguistic meaning because it can borrow models from semantics or pragmatics. It is obvious that while analyzing the hyperbolic utterance in (8), a self-implicature was pointed out: though the emotional relation and attitude towards the topic of speech represents a specific intermediate type between objective and self-implicatures (it informs about both the topic and the speaker), the aspect of self-presentation has led our investigation into the area of social psychology. Neither the linguistic facets of politeness nor the role of hyperbole in discourse can be described within the frames of only pragmatics or only social psychology. The cooperation and attachment of the two disciplines can yield a more detailed explanation of the phenomena covered by interpersonal rhetoric.

To recapitulate, the Gricean umbrella has proven to be steady theoretical ground: concerning its literal meaning, hyperbole really is a partial lie, that is, it has a reduced truth value or extremely subjective connotation, and this fact is mutually unequivocal for the conversational participants. The speaker, therefore, cannot mean to mislead his/her partner; rather, to utilize its expressivity in the representation of the emotional relation and attitude towards the topic of conversation, and—through increasing expressivity—to construct, maintain, or repair his/her own face desired in social contact, or to serve the faces of others. At the other side, the hearers recognize the violation of the Maxim of Quality, they reconstruct the truth value of the proposition while some kind of hypothesis is created about the implicit message of the exaggeration. If the emotional load of the hyperbolic utterance is not credible, the endeavour to manage the self (which the speaker, naturally, does not want to make visible) may be discovered.

If we are on the right track in analyzing overstatements, then steps followed in the case of the example taken from the film *Hyppolit, a lakáj* (Hyppolit, the butler) can be generalized (cf. Grice 1975, 49–50) as shown in (10):

- (10) (a) The speaker has said that *p*;
 (b) according to the linguistic, metacognitive, and world knowledge of every competent language user, *p* is an exaggerative proposition; the speaker obviously violated the Maxim of Quality with its use;
 (c) there is no reason to suppose that the speaker is not observing the Gricean maxims, or at least the Cooperative Principle, thus he/she does not want to mislead anybody but rather to exploit the maxim;
 (d) hence, first, supposition *q* is needed, which is a more adequate version of *p* concerning its relation to the real state of affairs (in a diachronic perspective, *q* may become lexicalized—but even so, the original semantic contrast between *p* and *q* more or less remains);

second, supposition *r* is needed for identifying the speaker's emotional and evaluative attitude towards the topic of conversation on the basis of the hyperbole (*r* can also be conventionalized, at least partly; however, the stylistic value of the expression holds the subjective overtones);

and third, insofar as the context and supposition *r* jointly support such an additive inference, supposition *s* is needed as well, which is a self-implicature on the self-presentational role of *p* manifested through *r*;

- (e) the speaker knows (and knows that the participants know that he/she knows) that it is within their competence to work out, or grasp intuitively, that *q* and *r* (and *s*) are required, surpassing the literal meaning of *p*;
 (f) the speaker has done nothing to stop his/her partners thinking *q* and *r* (and *s*);
 (g) that is, he/she intends the hearers to think, or is at least willing to allow them to think that *q* and *r* (and *s*); so he/she has implicated *q* and *r* (and *s*).

Some readers may think at this point that the pattern proposed in (10) deals with literal meaning as if it was a unique concept without any problem and the reaching of at least *q* and *r* from the literal meaning of *p* should be imagined in such a way that the hearer always understands the literal meaning at first, and then, if (b) and (c) are valid, he/she goes on with interpreting the indirect emotional and social meanings. Actually, one of the most vigorous lines of critique of Grice's theory has been questioning the psychological reality of this two-levelled (sentence-meaning vs. utterance-meaning) model (see, e.g., Rumelhart 1979; Gibbs 1984; 1994; 2002; Recanati 1995; Ariel 2002; Giora 2002). Aside from the fact

that the intermediate level of utterance-type-meaning with a host of default inferences or generalized conversational implicatures seems to be ignored in the literal meaning debate (see Levinson 2000, 21–7), what I am inclined to think is that the widespread rejection of Grice is based on a disputable view of his goals by taking him to be engaged in the same project that his opponents (mostly, relevance theorists and cognitive psycholinguists) are: making sense of the psychological processes by which the audience interpret utterances (Saul 2002). No doubt, Grice's characterization of conversational implicature—and the present application of his steps for describing the full message of a hyperbole in (10)—would be very poorly suited to offering an accurate theory of the interpretation process itself. But the Gricean approach has a different subject matter: neither the speaker's nor the audience's perspective is stated to be favoured; instead, it provides a scheme of how interactants cooperate in talk exchanges by conveying explicit and implicit information. We never know what the real intention of the speaker was and what interpretation the hearer actually arrived at; however, we can take the position of a keen observer, inferring independently what was said and implicated by the use of a given linguistic expression at a given setting. The reader is kindly asked to test this fallible intuition.

As far as the notion of literal meaning is concerned, I agree with Dascal (1987, 264) that it plays a role in understanding figurative language (which does not mean that the complete literal meaning of the utterance must be analyzed), but only if the frequent use of a phrase has not already led to total (or a high degree of) conventionalization, a historical development which gives quasi-literal status to originally figurative meanings in people's mental lexicon from time to time. Like metaphors that have been commonly characterized as existing on a continuum of conventionality, ranging from dead (or frozen) to living (or novel), hyperboles also involve many frozen forms which are not implicatures in nature any more, thus their meaning cannot be regarded synchronically as figurative. I suspect that if researchers systematically separated diachronic and synchronic figurativeness, in so far as it is technically possible in case of a continuum, the notion of literal or, more precisely, conventional meaning would regain some of its explanatory power. In sum, at a lower level of conventionality, it can be safely hypothesized that people, consciously or unconsciously, compare what was said by the speaker with the real state of affairs, and when a blatant exaggeration is disclosed, they try to assess the implicit content of the overstatement.

5. The complex approach at work: Analyzing further hyperbolic utterances

To ascertain whether or not the pattern given in (10) is tenable, further analyses of hyperbolic discourses are required. For the sake of vividness and advantages indicated in connection with the *Hyppolit*-example (controllability, the transparency of the characters' social motives, and the similarity between conversational situations depicted and everyday interaction), let us continue with some more Hungarian feature films from the 1930s, beginning with one part of *Ida regénye* (My wife the miss—The story of Ida, 1934):

- (11) ELLA: ((stirring the goulash)) Megvagyunk mi Julis nélkül is. Ilyen bogrács-gulyást még az öregapjuk sem evett. Igaz-e, Bogár úr?
'We can do without Julis as well. Even your grandfathers did not eat such a goulash, did they, Mr. Bogár?'
- BOGÁR: ((looking at his plate with a long face)) Hát az igaz. Ilyet nemigen ettek. (1.0) Tessék énnekem megmondani, de őszintén: mit tetszett ebbe beletenni, hogy olyan (.4) *i:stentelenül finom*?
'That is true. They did not eat such a goulash. (1.0) Please tell me sincerely: what did you put into this that makes it so (.4) *te:rribly tasty*?'
- ELLA: Saját receptem. Akar még egy porciót?
'It is my own recipe. Do you want some more?'
- BOGÁR: ((with a refusing gesture)) Köszönöm, éppen elég volt. Jaj nekem. *De jó volt...*
'No more, thank you. Oh dear. It was *so good...*'

Gloss: Mr. Bogár, a winetaster, works for Péter Ó, a winetrader in Eger. Péter Ó lost his wife a long time ago. Then he lived a debauched life, but now he remarries: he chooses Ella, an actress from a local theatre with a questionable past. The new husband has an adolescent daughter from his first marriage, Ida, who is expelled from the convent because she admits to writing a love letter for another girl. The young couple is disturbed by her unexpected arrival, therefore they quickly marry her off through a personals ad. They send even Julis, the cook, with Ida to the new flat in Pest, but this way there is no one to cook for them at home. In the beginning, Ella tries to do all the household chores (some time later her enthusiasm subsides, as we see). In (11) she praises one of her first meals to Mr. Bogár, who sits at the table with a sour face and who does not dare to tell her directly that the goulash tastes bad,

instead, he asks an ambiguous and ironic question (cf. (7b)). Ella does not recognize the irony behind his words, she tries to offer the meal to him again, which reflects her unrefined character.

According to the symbols introduced in (10), p_1 : the goulash is terribly tasty and p_2 : it was so good to eat; p_1 and p_2 are ironic hyperboles or hyperbolic ironies (cf. (1c)), therefore q_1 : the goulash is not good and q_2 : it was bad to eat; r_1 and r_2 : Bogár dislikes the fact that the goulash is not good but he must eat it; s_1 and s_2 : Bogár does express his real opinion, at least indirectly, but he applies a face-saving form using disguised irony—thus, he does not risk seriously his subordinated state (his job) towards Ella. Note that here only the audience works out these implicatures. The addressee herself cannot catch the hints: she thinks that Mr. Bogár is flattering on her. Therefore, if we adopt Ella's point of view, irony is out of the question, and what remain are bare hyperboles with the opposite (non-ironic) meaning.

The next example comes from the comedy *Három sárkány* (Three spinsters, 1936) featuring typical Hungarian landless gentry:

- (12) CSAHOLYI: Most arról van szó, Jóska, hogy téged akarnak felküldeni Pestre az ügyet elintézni. ((eagerly)) Nézd, Jóska, én kilenc éve nem voltam Pesten. *Én már elepedek, én már elsorvadok, engem már ellep a gaz, szívemet benövi a bojtorján itt, a kávési határban.* ((begging)) Jóska! Csináld meg, hogy én menjek föl Pestre!

'Now, Jóska, they want you to go to Pest to clear up this case. Look, Jóska, I have not been to Pest for nine years. *I'm desolate, I'm wasting away, I will be covered with weed, my heart will be overgrown with burdock* here in the Kávás fields. Jóska! Please convince them that I should go to Pest!'

KEMPELEN: ((hesitating)) Nézd, lelkem, ez nagy felelősség. . .

'Look, my dear, it is a great responsibility. . .'

CSAHOLYI: Jóska, ki tudja, hogy meddig élek én még. . . És, hát így haljak meg én, Csaaholyi Balázs, volt hetes huszárcapitány, hogy legalább egy-két szép napom ne legyen azon a gyö:nyörű Pesten? . . .

'Jóska, who knows how long more I will live. . . And should I, Balázs Csaaholyi, ex-captain of hussars, die without having some days in that beautiful Pest?'

KEMPELEN: Borzasztó, hogy mindig leveszel a lábamról. Tavaly is így vettél ki tőlem 175 pengő és valami 60 fillért.

'It is terrible that you always get me to do what you want. Last year you got 175 pengo and some 60 fillér out of me in this way.'

Gloss: The happy-go-lucky Balázs Csaaholyi lives under the guardianship of his sisters, the three spinsters, at their property in Kávás. He tries

to exploit every rare occasion to leave his isolation in the country, thus he tries to profit from the 8000 pengő debt of his son, a law student at Pest, who—just like his father—is careless, too. He gets Kempelen, the lawyer of the family, to persuade his sisters that he (Csaholyi) should go to Pest to clear up this case. In (12) he is trying to convince Kempelen that he would like to see Pest once again, free from the protection of his sisters. As can be seen, he accumulates the hyperbolic sighs recalling the images of the Hungarian ‘wasteland’. The hesitating Kempelen is not able to refuse the cunning demand, even though he suspects that he will have some problems caused by this trip.

p_1 – p_4 : Csaholyi is desolate, wasting away, will be covered with weed, his heart will be overgrown with burdock in Kávás; p_1 – p_4 are metaphoric hyperboles (cf. (1b)), therefore q_1 – q_4 : he begins to lose his vitality in Kávás; r_1 – r_4 : he finds it hard to bear his fate; s_1 – s_4 : as a man, he is worthy of compassion, his situation is unbearable, his sisters treat him unjustly, the partner (Kempelen) must feel pity for him. As to impression motivation, Csaholyi’s strategic goal (getting to travel to Pest) makes the image of a pitiful ex-cavalier sentenced to exile in the country relevant, which is constructed in Kempelen, who is in an intermediary position between Csaholyi and his sisters, and the goal itself is worth anything for him—these motives start him on the self-presentation according to s_1 – s_4 .

Let us look at an example of hyperbole with a finer emotional tone (*Lovagias ügy* (An affair of honour), 1936):

- (13) BABA: ((arrives home excited)) Kez’ csókolom! Szervusz, apu.
 ‘Good afternoon! Hi, Dad.’
- MRS. VIRÁG: Hol voltál ilyen sokáig?
 ‘Where have you been so long?’
- BABA: Jaj, anyu, ne kérdezz most semmit, mert én mondok egy fantasztikusat: a Réz Pali kivitt az autójával a jégre, és megbeszéltük, hogy tanul nálam angolul, és öt pengő ötvenet fizet óránként!
 ‘Oh Mum, don’t ask anything now because I tell you something fantastic: Pali Réz took me to the ice with his car, and we agreed that I would teach him English, and he will pay 5 pengő 50 an hour!’
- MR. VIRÁG: Addig csinálod ezt a szélhámosságot evvel az angollal, míg egyszer, majd meglátod, lecsuknak (.4) Márianosztróra.
 ‘You will do this mischief with your English until the day you’ll be jailed in (.4) Márianosztró, you’ll see.’
- MRS. VIRÁG: Öt pengő ötvenet fizet egy órára?
 ‘5 pengő 50 for an hour?’

BABA: *Kereken.* Jaj, anyukám, adj egy kis levest, mer' *ré:misztően éhes vagyok!*

'*Exactly.* Oh Mum, give me a little soup cause I am *awfully hungry!*'

Gloss: Mr. Virág, chief accountant with the Milkó tinned food factory, has an argument one day with Pál Milkó, who is kept in his job by the director, his uncle. Milkó slaps the elderly man on the face, and the latter, deeply offended, quits his job but hides this from his family. Milkó would like to repair his wrongdoing. He writes a letter of apology (which the grandmother takes for a bill from the tailor and puts it into her pocket), and later, because his letter is not answered, becomes the renter of their spare room under the alias Pál Réz in order to give them financial support. Mrs. Virág comes to like him because of his kindness, and he falls in love with Baba, the daughter of the Virágs at first sight. Baba, who does not speak English well, would like to help her parents: she wants to earn money to perfect her own English by teaching the boy next door and Pali 'Réz', who speaks English perfectly, but asks Baba to teach him English with the intention of courting her. Her excitement in (13) is caused more by the new lover than by the new student. Baba recognizes that the wealthy tenant likes her and she returns his feelings. Her 'awful' hunger must be analysed in the light of these: it latently expresses the happy emotion of a new love (the significative mimics of Mrs. Virág shows that she notices this, too), there is no rhetorical awareness behind it (cf. situation (2) of Jones-Pittman (1982, 234), characterized by the low level of impression monitoring).

p: Baba is awfully hungry; *p* contains an exaggerative adverb, therefore *q*: Baba is very hungry; *r*: she admits a positive attitude towards eating; *s*: not present or uncertain—perhaps change of topic, prevention of other parental questions concerning the afternoon spent with Pali Réz, strengthening the face of a 'responsible, clever young girl' (with a good sense for business) rather than the face of a 'flirting girl'. As I referred to this before, the absence of an intended self-implicature or the difficulty of its detection do not mean that the observers (here, mainly, Mrs. Virág) cannot have some kind of impression of the speaker on the basis of her verbal and nonverbal behaviour.

Our fourth excerpt in this section is taken from the comedy *Az én lányom nem olyan* (My daughter is different, 1937):

- (14) KALOCSAY: Ide figyeljen, én segíteni fogok magának. Maga viszont segítségemre lesz nekem. Rendben van?
 ‘Look, I will help you. But you will also help me. All right?’
- GITTA: Milyen ügyben?
 ‘In what kind of case?’
- KALOCSAY: Annie tante ugyanis megígérte, hogy kifizeti az összes adósságaimat, ha szakítok a lump élettel, és megházasodom. (.4) Magát szemelte ki erre a célra...
 ‘Aunt Annie promised that she will pay back all my debts if I break with reveller life and get married. (.4) She has chosen you for this purpose.’
- GITTA: ((laughing)) S maga megígérte, hogy elvesz?
 ‘And have you promised that you will marry me?’
- KALOCSAY: Meg. (.6) Neki. ((impudently)) Magának viszont ünnepélyesen megígérem az ellenkezőjét.
 ‘I did. (.6) To her. To you, I solemnly promise the opposite.’
- GITTA: ((offended)) Nagyon kedves...
 ‘Very kind of you...’
- KALOCSAY: Én ugyanis megmagyaráztam Annie néninek, hogy a maga meghódításához nekem másfél évre van szükségem... hát, őszintén szólva, ezt most már nem hiszem...
 ‘You see, I explained to aunt Annie that I will need one and a half year to conquer you... But now, to tell you the truth, I don’t think so...’
- GITTA: Pedig nyugodtan elhiheti.
 ‘But you can safely assume that.’
- KALOCSAY: ((courting)) Igazán? Gondolja, hogy ennyi idő alatt sikerülne?
 ‘Really? Do you think I would succeed within this time?’
- GITTA: Nem, nem sikerülne. *Magának ehhez ezer esztendő se lenne elég.*
 ‘No, you wouldn’t. You would not succeed *even within a thousand years.*’
- KALOCSAY: ((looks at his watch, joking)) Hát, annyi időm nincs...
 ‘Well, I don’t have that much time...’

Gloss: Gitta Hubay is 20 years old, a girl with modern attitudes, who is courted by Feri Fekete. Not particularly liked by Gitta’s parents, especially her old-fashioned father, Fekete dates Gitta in secret. When he calls her to his flat pretending to be ill, Gitta becomes disappointed in him and breaks with him. The highly respected aunt Annie, who wants to marry Gitta off, would like to introduce the girl to her husband’s nephew, Sándor Kalocsay, not suspecting that they know each other through Feri, and they like each other, too. After aunt Annie tells Kalocsay who she

would like to introduce to him, he goes to Gitta's house. He asks to leave the rich old lady in her belief that they would meet for the first time at the party. At this time, Kalocsay does not know whether Gitta really loves Feri Fekete, thus, he tries to find out about the girl's feelings by behaving in an arrogant and scornful way. Gitta's hyperbolic utterance in (14) is an answer to Kalocsay's egoistic, almost disrespectful manner: she does not know whether the young man is joking or speaking seriously, however, she expresses the offendedness of a young lady in a symbolic way and refuses the impudence. Kalocsay's joke at the end of the conversation convinces her that the young man is teasing her because he actually wants to court her.

p: Gitta says that Kalocsay would not conquer her even within a thousand years; *p* contains an extreme attribute of quantity, therefore *q*: according to Gitta, Kalocsay could not or would not conquer her; *r*: she categorically refuses the thought of Kalocsay's courting; *s*: Gitta is a moral young lady, who is not so easy to conquer as Kalocsay thinks. The message of self-implicature *s* can be traced back to Gitta's self-concept, her positive and negative identity images, and the social expectations towards an ideal woman.

The last selected passage is one of the love duets in *Halálos tavasz* (Deadly spring, 1937):

(15) EGRY: ((grasps Edit's arm, intimately)) Ide hallgass! Tegnap Budán sétáltam egy álomszerű, elhagyott kis utcán. Ág utca. Láttam egy házat, ki volt rá írva: kiadó. Bementem. Csak egy szoba volt benne. Egy. (1.0) Kivettem az egész házat kerttel együtt hat hónapra.

'Listen to me! Yesterday I was walking in Buda in a dreamlike abandoned little street. Ág Street. I saw a house, it was to rent. I went in. There was only one room in it. Only one. (1.0) I have rented the whole house with the garden for six months.'

EDIT: Te el akarsz menni ebből a házból?

'Do you want to leave this house?'

EGRY: Dehogynem. De ott nem zavarnának bennünket.

'Not at all. But there, we would not be disturbed.'

EDIT: Órült!

'You're crazy!'

EGRY: Miért? Anyád előtt már a menyasszonyom vagy.

'Why? In your mother's eyes you are already my fiancée.'

EDIT: Nem, nem. Semmi szín alatt.

'No, no. Not by any means.'

EGRY: Nézd... ((change of scene, they are walking in Buda))

'Look...'

Gloss: Dr. Iván Egry, a landowner from the country, gets a job in Budapest. He first meets Edit, the daughter of the ex-minister Ralben, in a staircase. He tries to call her on the phone, he sends a message to her on a gramophone disk, then with the help of a friend, he gets himself invited to the Ralbens' party. Edit is now Count Ahrenberg's fiancée, but she accepts Egry's heated courting. Egry becomes a daily visitor at the Ralbens'. Edit's mother seems to dislike their relation, however, she promises them her support, while Mr. Ralben does not even recognize the presence of a new suitor, nevertheless, he and his mysterious wife disturb the privacy of the young couple at every turn. Egry proposes audaciously in (15) to spend the afternoons in a rented house in Buda. Edit is surprised by the tempting offer, which overtly ignores the conventions of courting, and she calls the passionate man crazy. In this context, this hyperbole is a reaction to the challenge of the socially expected role of a young woman. Its credibility is somehow weakened by Edit's nonverbal signs, which suggest uncertainty and secret thoughts. Indeed, she later agrees to the dates in Buda at Egry's insistence.

p: Edit calls Egry crazy; *p* is literally an exaggeration, therefore *q*: Egry is too audacious and passionate; *r*: Edit is frightened by Egry's impudently sincere proposal and passionate behaviour, which she condemns (or, at least, does not regard as usual); *s*: Edit is an honest girl, who knows what is acceptable by the etiquette, and she does not want to do anything that is opposed to it. Similarly to the previous example, the content of the self-implicature is constructed by the relation of the heroine's self-concept, positive and negative identity images, and the ideal role of a woman.

6. Conclusion

All in all, three important conclusions can be made on the basis of the analyses. The first is a methodological one: the place of the relevant linguistic data in discourse, the situation of speech in its entirety, and the appropriate knowledge of the participants' interactional motives can illuminate certain pieces of information which may remain hidden if we tried to analyze the pragmatic or rhetorical function of figuration without any context. However, the incidental circumstances do not exclude at all the possibility of generalization. The second conclusion is that every hyperbole conveys the speaker's (real or merely presented) relation or attitudes towards the topic of communication. Further, the expression of

emotional relation and attitude tends to be subordinated to the speaker's attempt (according to the social psychological laws of interaction) to create an intended ideal impression on the partners—this is the third main conclusion.

Public acts inevitably create impressions on the observers. Since the possible implications of this simple fact can be too important for anyone not to affect behaviour, no wonder that, as Goffman (1959, 4) put it, “[w]hen an individual appears in the presence of others, there will usually be some reason for him to mobilize his activity so that it will convey an impression to others which is in his interest to convey.” Thus, it must be natural that the use of exaggeration is not an exception to this many-sided tendency in behaviour, albeit the rhetorical awareness of the speaker may be at a preattentive level, and the stylistic value of the linguistic expression can lose its genuineness, becoming conventionalized by frequent use.

The other means of interpersonal rhetoric (metaphor, irony, litotes, etc.) have been mentioned here only briefly. I suppose that the complex social psychological pragmatic approach applied in this paper can be fruitful in investigating their discourse goals as well (which are surely different from the ones of hyperbole). But, as for hyperbole, what is also needed is the quantitative and genre-related extension of the linguistic database in order to be able to draw more refined conclusions about the nature of self-implicature.

References

- Ariel, Mira 2002. The demise of a unique concept of literal meaning. In: *Journal of Pragmatics* 34:361–402.
- Arkin, Robert M. 1981. Self-presentation styles. In: Tedeschi (1981, 311–33).
- Atkinson, J. Maxwell John Heritage (eds) 1984. *Structures of social action: studies in conversation analysis*. Cambridge University Press, Cambridge.
- Bally, Charles 1913. *Le langage et la vie*. Édition Atar & Librairie Fischbacher, Genève & Paris.
- Baumeister, Roy F. (ed.) 1986. *Public self and private self*. Springer-Verlag, New York.
- Brown, Penelope–Stephen C. Levinson 1978. Universals in language usage: politeness phenomena. In: Esther N. Goody (ed.): *Questions and politeness: strategies in social interaction*, 56–289. Cambridge University Press, Cambridge.
- Brown, Penelope–Stephen C. Levinson 1987. *Politeness: some universals in language usage*. Cambridge University Press, Cambridge.

- Colston, Herbert L. 1997. I've never seen anything like it: overstatement, understatement, and irony. In: *Metaphor and Symbol* 12:43-58.
- Colston, Herbert L. – Shauna B. Keller 1998. You'll never believe this: irony and hyperbole in expressing surprise. In: *Journal of Psycholinguistic Research* 27: 499-513.
- Dascal, Marcelo 1987. Defending literal meaning. In: *Cognitive Science* 11:259-81.
- Fogelin, Robert J. 1988. *Figuratively speaking*. Yale University Press, New Haven.
- Fussell, Susan R. – Roger J. Kreuz (eds) 1998. *Social and cognitive approaches to interpersonal communication*. Lawrence Erlbaum, Mahwah NJ.
- Fussell, Susan R. – Mallie M. Moss 1998. Figurative language in emotional communication. In: Fussell – Kreuz (1998, 113-41).
- Fónagy, Iván 1975. [A] hiperbola [Hyperbole]. In: István Király (ed.): *Világirodalmi lexikon* 4 [An encyclopaedia of world literature, vol. 4], 480-6. Akadémiai Kiadó, Budapest.
- Fónagy, Iván 2001. *Languages within language: an evolutive approach*. John Benjamins, Amsterdam.
- Gibbs, Raymond W. 1984. Literal meaning and psychological theory. In: *Cognitive Science* 8:575-604.
- Gibbs, Raymond W. 1994. *The poetics of mind: Figurative thought, language, and understanding*. Cambridge University Press, Cambridge.
- Gibbs, Raymond W. 2002. A new look at literal meaning in understanding what is said and implicated. In: *Journal of Pragmatics* 34:457-86.
- Giora, Rachel 2002. Literal vs. figurative language: Different or equal? In: *Journal of Pragmatics* 34:487-506.
- Goffman, Erving 1955. On face-work: an analysis of ritual elements in social interaction. In: *Psychiatry* 18:213-31.
- Goffman, Erving 1959. *The presentation of self in everyday life*. Doubleday Anchor, Garden City.
- Grice, H. Paul 1975. Logic and conversation. In: Peter Cole – Jerry L. Morgan (eds): *Syntax and semantics*, vol. 3: *Speech acts*, 41-58. Academic Press, New York.
- Jones, Edward E. – Thane S. Pittman 1982. Toward a general theory of strategic self-presentation. In: Jerry Suls (ed.): *Psychological perspectives on the self*, vol. 1., 231-62. Lawrence Erlbaum, Hillsdale NJ.
- Kreuz, Roger J. – Max A. Kassler – Lori Coppenrath 1998. The use of exaggeration in discourse: cognitive and social facets. In: Fussell – Kreuz (1998, 91-111).
- Kreuz, Roger J. – Richard M. Roberts 1993. The empirical study of figurative language in literature. In: *Poetics* 22:151-69.
- Kreuz, Roger J. – Richard M. Roberts 1995. Two cues for verbal irony: hyperbole and the ironic tone of voice. In: *Metaphor and Symbolic Activity* 10:21-31.
- Kreuz, Roger J. – Richard M. Roberts – Brenda K. Johnson – Eugenie L. Bertus 1996. Figurative language occurrence and co-occurrence in contemporary literature. In: Roger J. Kreuz – Mary Sue MacNealy (eds): *Empirical approaches to literature and aesthetics*, 83-97. Ablex, Norwood NJ.

- Lausberg, Heinrich 1960/1998. *Handbook of literary rhetoric: a foundation for literary study*. Brill, Leiden.
- Leary, Mark R. 1993. The interplay of private self-processes and interpersonal factors in self-presentation. In: Jerry Suls (ed.): *Psychological perspectives on the self*, vol. 4., 127–55. Lawrence Erlbaum, Hillsdale NJ.
- Leary, Mark R. 1995. *Self-presentation: impression management and interpersonal behavior*. Brown & Benchmark, Madison WI.
- Leary, Mark R. – Robin M. Kowalski 1990. Impression management: a literature review and two-component model. In: *Psychological Bulletin* 107: 34–47.
- Leech, Geoffrey N. 1983. *Principles of pragmatics*. Longman, Harlow.
- Levinson, Stephen C. 2000. Presumptive meanings: The theory of generalized conversational implicature. MIT Press, Cambridge MA.
- Mao, LuMing R. 1994. Beyond politeness theory: ‘face’ revisited and renewed. In: *Journal of Pragmatics* 21: 451–86.
- Muntigl, Peter – William Turnbull 1998. Conversational structure and facework in arguing. In: *Journal of Pragmatics* 29: 225–56.
- Nemesi, Attila László 2000. Benyomáskeltési stratégiák a társalgásban [Strategies of impression management in conversation]. In: *Magyar Nyelv* 96: 418–36.
- Németh T., Enikő 2003. A kommunikatív nyelvhasználat elvei [The principles of communicative language use]. In: *Általános Nyelvészeti Tanulmányok* 20: 221–54.
- Németh T., Enikő 2004. The principles of communicative language use. In: *Acta Linguistica Hungarica* 51: 379–418.
- Nwaye, Onnigbo G. 1992. Linguistic politeness and sociocultural variation of the notion of face. In: *Journal of Pragmatics* 18: 309–28.
- Penman, Robyn 1990. Facework and politeness: multiple goals in courtroom discourse. In: *Journal of Language and Social Psychology* 9: 15–38.
- Péter, Mihály 1984. Érzelemkifejezés, stílusérték és expresszivitás a nyelvben [Emotivity, stylistic value, and expressivity in language]. In: *Általános Nyelvészeti Tanulmányok* 15: 219–35.
- Péter, Mihály 1991. A nyelvi érzelmkifejezés eszközei és módjai [Means and devices of the expression of emotions in language]. Tankönyvkiadó, Budapest.
- Recanati, François 1995. On the alleged priority of literal interpretation. In: *Cognitive Science* 19: 207–22.
- Roberts, Richard M. – Roger J. Kreuz 1994. Why do people use figurative language? In: *Psychological Science* 5: 159–63.
- Rumelhart, David E. 1979. Some problems with the notion of literal meanings. In: Andrew Ortony (ed.): *Metaphor and thought*, 78–90. Cambridge University Press, Cambridge.
- Sandig, Barbara 1986. *Stilistik der deutschen Sprache*. Walter de Gruyter, Berlin & New York.
- Saul, Jennifer M. 2002. What is said and psychological reality: Grice’s project and relevance theorists’ criticisms. In: *Linguistics and Philosophy* 25: 347–72.
- Schlenker, Barry R. 1980. *Impression management: the self-concept, social identity, and interpersonal relations*. Brooks/Cole, Monterey CA.

- Schlenker, Barry R. (ed.) 1985. *The self and social life*. McGraw-Hill, New York.
- Schlenker, Barry R. 1986. Self-identification: toward an integration of the private and public self. In: Baumeister (1986, 21–62).
- Schneider, David J. 1981. Tactical self-presentations: toward a broader conception. In: Tedeschi (1981, 23–40).
- Sell, Marie A. – Roger J. Kreuz – Lori Coppenrath 1997. Parents' use of nonliteral language with preschool children. In: *Discourse Processes* 23: 99–118.
- Sperber, Dan – Deirdre Wilson 1990. Rhetoric and relevance. In: John Bender – David Wellbery (eds): *The ends of rhetoric: history, theory, practice*, 140–56. Stanford University Press, Stanford CA.
- Szathmári, István 1958. A szó jelentésének stilisztikai vizsgálata [The stylistic investigation of word meaning]. In: Ferenc Terestyéni (ed.): *A magyar stilisztika vázlata* [An outline of Hungarian stylistics], 65–148. Tankönyvkiadó, Budapest.
- Tedeschi, James T. (ed.) 1981. *Impression management theory and social psychological research*. Academic Press, New York.
- Tedeschi, James T. – Nancy Norman 1985. Social power, self-presentation, and the self. In: Schlenker (1985, 293–322).
- Tolcsvai Nagy, Gábor 1996. *A magyar nyelv stilisztikája* [A stylistics of Hungarian]. Nemzeti Tankönyvkiadó, Budapest.
- Tracy, Karen 1990. The many faces of facework. In: Howard Giles – W. Peter Robinson (eds): *Handbook of language and social psychology*, 209–26. Wiley, Chichester.
- Wood, Linda A. – Rolf O. Kroger 1994. The analysis of facework in discourse: review and proposal. In: *Journal of Language and Social Psychology* 13: 248–77.

Address of the author: Attila L. Nemesi
Institute of Communication
Pázmány Péter Catholic University
Egyetem utca 1.
H-2087 Piliscsaba
Hungary
nemesi@btk.ppke.hu

THE PRINCIPLES OF COMMUNICATIVE LANGUAGE USE*

ENIKŐ NÉMETH T.

The paper aims to overview some typical principles of communicative language use in a cognitive pragmatic approach applying a reductionist method in order to demonstrate that the well-known principles can be reduced to a very general rationality (economy) principle. After briefly reviewing the principles the paper re-evaluates them and provides a new classification of them relying on the definition of ostensive-inferential communication. The principles which can be divided into rationality and interpersonality principles are really principles of effective information transmission on objects and selves. They refer to two kinds of language use: informative and communicative ones. The only principles valid for only communicative language use are the communicative principle of relevance and the principle of communicative intention suggested in the present article. Finally, the paper reduces all rationality and interpersonality principles to a very general rationality principle, i.e., the cognitive principle of relevance.

1. Introduction

1.1. Aims

The present paper aims to explore some of the typical principles of communicative language use. As a starting-point for the investigation, I will define communicative language use within the scope of pragmatic competence. Then I will give a brief overview of the possibilities raised in the linguistics literature of how to interpret the term *principle*, as well as select the relevant interpretations fitting in with the aims of this paper. After completing these tasks, I will have three main goals: (i) to choose, briefly characterize and evaluate some typical communicative principles treated by the pragmatics literature; (ii) to re-evaluate the chosen principles and provide a new classification of them relying on the definition of ostensive-inferential communication, and (iii) to demonstrate that all

* The research reported here was partly supported by the Bolyai János Research Grant. I would like to thank Károly Bibok and the anonymous reviewers of the earlier version of the present paper for their helpful critical comments and suggestions which have helped me to clarify some points. All remaining shortcomings are, of course, my own responsibility.

principles can be reduced to a very general rationality (economy) principle, i.e., to the cognitive principle of relevance. It should be emphasized that I will not aim to deal with all principles assumed for verbal communication in the literature. I will choose only some typical well-known principles which I consider a necessary and sufficient basis for achieving the third goal of the present paper. On the basis of the definition of ostensive-inferential communication I also want to emphasize that the principles considered communicative ones in the pragmatics literature are really principles of effective information transmission either on objects or on selves, i.e., they play a considerable role in verbal information transmission without communicative intention. The only principles which refer solely to communicative language use are Sperber and Wilson's (1986/1995) communicative principle of relevance and the principle of communicative intention suggested in the present article. At this point, it should be noted that I take the notion of principle very strictly in the present paper. I consider only those constraints, prescriptions or generalizations which are called principles in the literature. However, if one looks at the content of the principles, and not just their labels, one can find other "principles" working in communicative language use. For example, Bach and Harnish (1979, 7) propose a communicative presumption not labelled "principle" which is similar to the principle of communicative intention in some respect.¹

According to the way of thinking sketched out above, the paper is organized as follows. Section 2 briefly characterizes the notions of pragmatic competence and communicative language use, while section 3 enumerates the possible interpretations of the term *principle*. Section 4 overviews some typical principles of communicative language use. In section 5 I evaluate the principles treated in section 4 independently of any particular pragmatics theory, then, relying on the definition of ostensive-inferential communication in relevance theory, I re-evaluate them, and further I suggest an old-new principle,² namely the principle of communicative intention. In the remainder of this section, I demonstrate that all principles can be reduced to a general rationality principle, i.e., to the cognitive principle of relevance. Section 6 summarizes the results.

¹ For more details see section 5.3.

² The adjective *old-new* means that the principle of communicative intention is an old one as to the main part of its content (see e.g., Grice 1975/1989; Bach-Harnish 1979; Sperber-Wilson 1986/1995), and at the same time, it is a new one as to its formulation as a principle.

1.2. A cognitive pragmatic approach and reductionist method

In the paper, I will study some typical principles of communicative language use in a cognitive pragmatic approach applying a reductionist method. One of the cognitive pragmatic approaches closely related to the generative linguistics paradigm, modular pragmatics (cf. Kasher 1986; 1991), intends to describe pragmatic competence as the faculty of language use, which contains the knowledge of ideal native speakers of a language about how to use their language in various situations to reach various goals. Pragmatic competence is one of the modules of the human mind which enables a native speaker to use sentences in accordance with his/her intentions to achieve goals (e.g., to complete various speech acts) in different contexts. The main question for generative modular pragmatics is how native speakers can apply their pragmatic abilities adequately in the course of constructing utterances.

Another cognitive pragmatic theory, namely relevance theory (cf. e.g., Sperber–Wilson 1986/1995; Kempson 1996; Sperber 2000; Carston 2000), also studies communication from the point of view of the activities of the human mind.³ But in contrast to generative modular pragmatics, relevance theory mostly deals with the comprehension processes and discusses what principles, constraints and restrictions are taken into account by the communicative partners to retrieve the information effectively and successfully from the sequences of words uttered or written. Therefore, the main question for relevance theory is how communicative partners interpret the communicators' ostensive communicative behaviour.⁴

However, if one focuses on the dynamism of communication, it is not sufficient to concentrate either on the communicator's actions, as modular pragmatics does, or on the partner's comprehension processes as relevance theory does. One should consider both the communicator's and the interlocutor's sides to describe and explain their communication.⁵

³ Relevance theory also supposes that the human mind has a modular organization, but the modularity hypothesis of relevance theorists has changed from the first summary of the theory published in 1986. See also fn. 8.

⁴ Ostensive behaviour is a kind of behaviour which makes manifest an intention to make something manifest (Sperber–Wilson 1986/1995, 49). The ostension will be discussed in more detail in section 4.

⁵ The definition of ostensive-inferential communication in relevance theory includes dynamism of communication (see (9) in section 4). This definition has served as one of the starting points for the elaboration of relevance theory. Therefore, it is very surprising that relevance theory restricts pragmatics to the investigation

To fulfil this requirement, I suggest an approach which unifies the main aims of the above-mentioned two cognitive pragmatics theories, i.e., I will discuss how native speakers of a language are able to use their language adequately to achieve various goals in different contexts, as well as what principles, restrictions or constraints play a role in comprehension processes.

In addition to the cognitive pragmatic approach, I will apply a reductionist method in the course of the investigation of the principles of communicative language use. The application of the reductionist method places my work in a line of pragmatic research that aims to reduce the categories and principles describing and explaining the rational behaviour of language users to more general categories and principles. Of course, a reduction can be successful only if the resulting categories or principles are able to describe and explain everything as well as, and even better than, the original categories and principles did (cf. e.g., Kasher 1976; Horn 1984/1998; Levinson 2000). In section 5, I will characterize principles belonging to various theories in a unified way on the basis of the definition of ostensive-inferential communication. This unified characterization makes it possible to have generalizations by means of which all principles can be reduced to a very general cognitive rationality principle.

2. Pragmatic competence and communicative language use

Chomsky (1977, 3) develops his competence–performance distinction, established in the early stage of generative linguistics (Chomsky 1965, 4), and states that, in the course of language acquisition, children acquire not only their native language but also the ways of using it. So children reach a cognitive state by the end of the language acquisition and language use acquisition processes that consists of two main components. One is the knowledge of language, i.e., grammatical competence, the other one is the knowledge of language use, i.e., pragmatic competence. Pragmatic competence enables people to use their knowledge of language to reach various general goals, e.g., to communicate, to think and to memorize in various situations. Pragmatic competence as a module of the human mind must be modelled by a pragmatic theory abstracting away from the

of comprehension processes and does not deal with the communicators' ostensive behaviour to a sufficient extent, in reality not taking into consideration the dynamism of communication.

particular realizations of language use in particular situations. Pragmatic competence cooperates with other cognitive structures and mechanisms (e.g., memory, perception, the social-interactive system) in the course of real language use. To describe this cooperation is a task of a performance theory (cf. Németh T. 1996, 6–7).

This Chomskyan (1977) perspective provides the approach of modular pragmatics to pragmatic competence as its basis. As we have seen in 1.2, in modular pragmatics Kasher (1986, 139–41; 1991, 386–92) characterizes the notion of pragmatic competence from the point of view of an ideal native speaker. Pragmatic abilities of native speakers include, among other things, the system of constitutive rules of speech acts; rules and principles governing basic aspects of conversation; principles and strategies governing rational intentional actions such as generating conversational implicatures; politeness considerations; as well as interface pragmatic knowledge to integrate data from a linguistic channel with data from other channels.⁶ In Kasher's (1991, 382) opinion—similarly to Chomsky's approach—the scope of pragmatic competence includes not only the knowledge governing language use in communication. Pragmatics cannot be identified with the study of verbal communication exclusively. Bierwisch (1980; 1983) also comes to the same conclusion but from a different starting point: he sharply criticizes speech act theory because of the identification of language use and communication and he emphasizes that the use of language to communicate is not the unique form of language use. There are several other kinds of language use such as the use of language to think, to memorize or to learn; the use of language in taking notes, in playing, in singing for fun or in psycholinguistic experiments, etc.⁷

However, there is an important difference between Chomsky's and Kasher's approaches concerning pragmatic abilities. Kasher (1991, 386–96) does not situate pragmatic knowledge in one module. He considers the abilities responsible for the linguistic government of language use modular, while the not purely linguistic factors governing language use are considered to be central. This interpretation of the notion of pragmatic competence has a wider scope than in Chomsky's definition. It also

⁶ In the present paper I do not deal with the inherent organization of pragmatic competence supposed by Kasher (1986; 1991).

⁷ Consequently, communicative competence as defined by Hymes (1972) cannot be identified with pragmatic competence, either: it is only a part of pragmatic competence. Another argument for this can be found in Németh T. (1996, 8–10).

contains a part of the knowledge and processes that Chomsky refers to as part of performance. Further, Kasher's pragmatic competence cannot be characterized in terms of the classical modularity hypothesis (Fodor 1983) either, because pragmatic competence is not a unique, informationally encapsulated system, so it cannot be considered a module in the classical Fodorian sense.

The other cognitive pragmatic theory, relevance theory, differs from Chomsky's approach to a greater extent than Kasher's modular pragmatics does. Relevance theorists (cf. e.g., Reboul-Moeschler 1998; Sperber 2000; Sperber-Wilson 2002) use an extended interpretation of modularity.⁸ The extended modularity hypothesis supposes that in addition to peripheral systems there is not only one central system in the human mind. Instead, peripheral systems can be connected with more than one conceptual module, and furthermore, the conceptual modules themselves are not independent of each other. In this new version of the modularity hypothesis, pragmatic competence is a metacognitive domain, the core ability of which is a metarepresentational ability. Pragmatic competence can be divided into three subsystems: 1. a metapsychology module which is responsible for thought attribution; 2. a comprehension module containing abilities by means of which one can find out the interlocutor's communicative intentions, and 3. a logical module which checks arguments. These three subsystems operate together when one applies pragmatic competence in the course of language use.⁹ The idea to situate pragmatic abilities in several modules is similar to Kasher's (1991) solution, and it differs from Fodor's (1983) classical modularity theory in the same way, i.e., it does not consider pragmatic competence to be a unique, informationally encapsulated system. However, I should note that the other non-communicative forms of language use mentioned above are not included in the definition of pragmatic competence formulated by relevance theorists. Relevance theory refers pragmatics only to communication; furthermore, it concentrates on the partners' comprehension tasks in ostensive-inferential communication. In this respect, pragmatic competence in relevance theory has a narrower scope than it does in Kasher's modular pragmatics. From another point of view, pragmatic competence

⁸ The earlier versions of relevance theory (cf. Sperber-Wilson 1986/1995) mostly rely on Fodor's (1983) classical modularity hypothesis. For a critical discussion of classical modularity see also Fodor (2000).

⁹ For more detailed discussion of the extended modularity hypothesis and changes of the modularity hypothesis in relevance theory see Pléh (2000b).

in relevance theory has a wider scope than it does in modular pragmatics, because pragmatic abilities are used not only in verbal communication but in all kinds of communication. Consequently, for relevance theory, pragmatics is not a linguistic subdiscipline.

The real existence of pragmatic competence seems to be supported by the latest neurolinguistic research (Paradis 1998). It differentiates damage in grammatical competence in the left hemisphere of the brain from damage in pragmatic competence in the right hemisphere of the brain very convincingly. This differentiation provides neurolinguistic evidence for the existence of pragmatic competence already hypothesized in pragmatic theories. In contrast with damage in the left hemisphere, lesions in the right hemisphere do not lead to grammatical (i.e., phonological, morphological, syntactic) deficits, that is, to one or another kind of aphasia, but they result in considerable systematic disfunctions in the course of the production and interpretation of indirect speech acts, conversational implicatures, metaphors, humour, discourse coherence etc. Evaluations of the neurological status of patients with damage in pragmatic competence demonstrate that pragmatic abilities are not restricted to a specific domain, but they are located in several sites in the right hemisphere of the brain.

Summarizing the relevant results of pragmatic theories and neurolinguistic research, as well as considering her own results, Ivaskó (2002) concludes that pragmatic competence cannot be considered a unique module in the mind. Rather, it can be characterized as an ability which organizes and governs the operations and cooperation of various systems, especially in the use of signs to communicate.

Relying on the results of pragmatic theory and neurolinguistics (cf. Kasher 1991; Paradis 1998; Sperber 2000; Ivaskó 2002), I define pragmatic competence as the faculty of the human mind not restricted to one module but containing and organizing procedural and declarative knowledge concerning not only communicative but all possible forms of language use. Abilities governing the production and interpretation mechanisms in verbal communication, i.e., abilities responsible for successful communicative language use, are subparts of pragmatic competence.

One of the central tasks of the disciplines investigating language use—e.g., pragmatics, discourse analysis,¹⁰ sociolinguistics, social psy-

¹⁰ The term *discourse analysis* covers all disciplines which deal with discourses or texts, e.g., conversation analysis, text analysis, text linguistics, discourse grammar.

chology—is to study what principles, constraints, restrictions govern or regulate language use (Levinson 1983). However, because of the fact that these disciplines analyse language use only in communicative interactions, principles supposed by them are really principles of communicative language use.

Before starting to discuss principles of communicative language use, I should make it clear in section 3 what interpretations of the term *principle* will be used in the following parts of the paper.

3. Interpretations of the term *principle* in linguistics

3.1. Rules and principles

Generative linguistics theories¹¹ model the knowledge of language, i.e., grammatical competence, by means of a formal rule system and also provide particular grammatical principles and constraints on the operation of rules. All these together are subsumed under the notion of grammar. The latest versions of Chomsky's generative grammar (see e.g., Chomsky 1995; Radford 1997) use the term *rule* less than earlier versions did, and sometimes they do not use it at all. Instead, rules are replaced by operations, constraints and principles.¹² Particular grammatical sentences of a language can be derived by means of the application of the operations taking into account the relevant principles and constraints. However, it is not quite clear what the essential difference is between rules and operations. Operations work very similarly to how rules were applied: that is the reason why operations can still be considered rules.¹³ One of the most important and distinctive features of grammatical rules is their predictivity. Word sequences constructed by grammatical rules, i.e., sentences, are always well-formed, they are not results of any choices, they are idealized and invariant in comparison with empirically observable utterances (Taylor–Cameron 1987; Németh T. 1994, 69; 1996, 22–8).

¹¹ By generative linguistics I mean not only the Chomskyan framework, but also each theory which operates by means of explicit rule application.

¹² The changes of generative grammar concerning the status of rules in the theory and the motivation for the changes are summarized and evaluated in Smith (1999). Generative grammatical and pragmatic (relevance theoretical) principles, their similarities and differences are discussed in Carston (2000).

¹³ Both terms, i.e., *operation* and *rule* are used e.g., in Smith (1999); É. Kiss (1998, 17 vs. 2003, 205).

Unlike grammatical competence, the ability to use language, i.e., pragmatic competence cannot be described by means of a strict formal rule system.¹⁴ The pragmatics literature supposes that the adequate use of language is governed by principles, strategies, restrictions and heuristics instead of rules in the above sense (Leech 1983; Mey 1995; Levinson 2000). However, it is worth noting that one can also meet the term *rule* in the literature on language use. A rule as a synonym for principle is not a constitutive, creative, inviolable inner rule like a grammatical rule. Such rules applied in the description of language use are regulative, contingent, not creative, they are social constructs similarly to Wittgensteinian rules (Pléh 2000a; Lerch 2002). However, there is another interpretation of the term *rule* in pragmatics, namely in speech act theory. Searle (1969) establishes constitutive rules for speech acts relying on conditions of success. The constitutive rules for speech acts are very similar to grammatical rules in their nature. If one fails to conform to a constitutive rule (at least one which states a condition of success for an act), then one will not have performed the act. Similarly, if one fails to conform to a rule of the grammar of a particular language, i.e., violates it, then one will not have generated a sentence of the given language.¹⁵ The formal and social interpretations of the concept of rule are not inconsistent, as is demonstrated by Kertész (2001) when he compares the theses of generative grammar and late Wittgensteinian philosophy from the points of view of the theory of science and the sociology of knowledge. The two interpretations of the term *rule* are not inconsistent not only in the study of language and language use, but they both can also be verified in the operation of the mind and even of the brain (Pléh 2001, 420–1).

The normative, prescriptive principles and restrictions of communicative language use that will be studied in section 4 belong to the second interpretation of *rule*. Since not all principles relating to communicative language use treated in the literature are prescriptive in nature, it seems reasonable to give an overview of the other possibilities of the interpretation of the term *principle* as well.

¹⁴ In the last decades, some researchers became sceptical in connection with rule application in modelling the knowledge of language (cf. e.g., Rumelhart et al. 1986) and proposed a special “double” model (cf. e.g., Pinker 1994). In these models, both rule based behaviour and associative organization are accepted. For the application of these models to Hungarian data see Lukács (2001); Pléh–Lukács (2002).

¹⁵ It is worth mentioning at the same time that one can speak ungrammatically, i.e., using non-sentences and still fulfil communicative goals and also be understood.

3.2. Interpretations of the term *principle*

The term *principle* has been widely used in the linguistics literature for a long time.¹⁶ It has at least four different interpretations. According to the first interpretation of the term, principles are considered to be means of description and explanation in particular grammars, both in synchronic and diachronic ones. In this sense, principles are concrete constraints, restrictions on the rules of a particular grammar, of a particular linguistic theory. The first modern use of the term, attributable to the neogrammarian Hermann Paul (1874), regards the principle of analogy as the main explanatory principle of diachronic grammar. The leading theoretician of Copenhagen structuralism, Louis Hjelmslev (1929; 1953) proposes principles in the synchronic, structural description of language and takes the principle of analysis to be the most important one. In Chomsky's (1995) minimalist program, the important principle of economy, which makes it possible to choose from alternative derivations of a sentence taking into account economic considerations, is also based on the first sense of *principle*.

The second interpretation of the term can be formulated as follows: principles are very general constraints on scientific descriptions of languages, i.e., they are not principles of particular synchronic or diachronic, descriptive or explanatory grammars but are imposed on grammars in general. The second interpretation of *principle* can also be recovered in Hjelmslev's (1929; 1953) works in linguistics. In this sense, principles are meta-meta principles such as criteria of simplicity, logical consistency, economy, exhaustive description etc. These general science theoretical and methodological constraints on the description of language are also valid for any kind of scientific theories.¹⁷

With the study of language use gaining increasing momentum from the 1970s on, a third, new interpretation of the term *principle* has appeared in the pragmatic literature. In this sense, principles operate in real language use, they are empirical, normative prescriptions followed by the language users consciously or unconsciously in order to communicate with each other successfully. These principles—e.g., Grice's (1975/1989) cooperative principle, Leech's (1983) politeness principle—can also be considered strategies or heuristics. This third interpretation of *principle*

¹⁶ The first use of the term *principle* can be attributed to Aristotle.

¹⁷ These general requirements come from the philosophy of science and theory of science at the beginning of the 20th century.

is identical with the second sense of *rule*, as was already mentioned in section 3.1.

And finally, there is a fourth interpretation of *principle* in the pragmatics literature, which has a growing importance in pragmatic studies. The fourth interpretation is similar to the third one in the sense that it treats principles as empirical, operating in real communicative situations, but it differs from the third interpretation in that it does not consider principles normative, prescriptive constraints. Principles in the fourth sense are empirical generalizations on the communicative behaviour of language users such as Sperber and Wilson's (1986/1995) communicative principle of relevance and a later extension of it to the whole of human cognition, i.e., the cognitive principle of relevance (Sperber–Wilson 1995).¹⁸ Sperber and Wilson do not assume an explicit knowledge and observation of the principles of relevance. The principles of relevance cannot be violated or flouted, the intention to behave relevantly and the presumption of relevance are innate properties of the human mind.

The term *principle* is widely used in the pragmatics literature in the above-mentioned third and fourth interpretations. So, on the one hand, principles of communicative language use are constraints, prescriptions and strategies that must be followed by language users in verbal communication in their negotiating behaviour, and, on the other hand, principles are statements that can be formulated as empirical generalizations about the language users' behaviour. Since one of the goals of the present paper is to overview and evaluate some typical principles of communicative language use, I will henceforward use the term *principle* in the third and fourth interpretations in accordance with the pragmatics tradition. Furthermore, in section 5, I will evaluate which particular principles are used in the third and which in the fourth sense of the term.

After completing the necessary preliminary tasks—i.e., defining communicative language use and the term *principle*—indicated in section 1, I will start to discuss principles of communicative language use in the next section.¹⁹

¹⁸ Sperber and Wilson propose only one principle of relevance, namely the communicative one in the first edition of their book in 1986. In the second, 1995 edition they take into account the latest developments of relevance theory and extend the presumption of relevance to the whole of human cognition, proposing two principles of relevance, communicative and cognitive principles.

¹⁹ As a starting-point for the study of principles of communicative language use, see Németh T. (2003).

4. Principles of communicative language use

4.1. Two classic principles

4.1.1. Grice's cooperative principle

Grice (1975/1989) investigates the conditions of the organization and operation of everyday language use irrespective of its subject matter and formulates the cooperative principle in order to explain the logic of conversations. The cooperative principle (Grice *ibid.*, 26) expresses the communicative partners' expectations as how to behave in conversations.²⁰

(1) COOPERATIVE PRINCIPLE:

Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.

Grice distinguishes four categories under the cooperative principle and, echoing Kant, he calls them the categories of quantity, quality, relation and manner. Without going into the details of these well known maxims, I want to note only that these categories govern not only information processing in everyday conversations, but also all kinds of rational social behaviour as it was emphasized by Grice (*ibid.*, 28) himself.

Since the meaning of utterances in everyday conversations cannot be identified with the meaning of sentences uttered, first of all, Grice intends to uncover the meaning of the utterances (cf. also Grice 1957/1989; 1968/1989).²¹ In addition to the explicit (in other words: literal, conventional) meaning of utterances, speakers convey implicit inferences, that is, in Gricean terms, conversational implicatures by means of flouting one—or more—of the above maxims relying on the cooperative principle.²² Conversational implicatures must be capable of being worked out on the basis of (i) the conventional meaning of the utterance, (ii) the

²⁰ The page numbers cited refer to the 1989 edition.

²¹ Grice (1957/1989; 1968/1989) distinguishes sentence meaning, utterer's/speaker's meaning and utterance meaning. (In the present paper, I will use *speaker's meaning* rather than *utterer's meaning*.) Speaker's meaning and utterance meaning are closely related, the latter is derivative of the former. Because of the close relationship between the two terms, *speaker's meaning* and *utterance meaning* are normally used as synonyms in the pragmatics literature.

²² Grice (1975/1989, 30) enumerates four cases of failing to fulfil a maxim in a talk exchange. Only the fourth case, i.e., flouting a maxim, gives rise to a conversational implicature. In this case a maxim is being exploited.

cooperative principle and its maxims, (iii) the context of the utterance, (iv) background knowledge and (v) by means of the assumption that information on the first four points are mutually available to participants.²³ According to Grice, the most general and important purpose of conversations is effective information exchange between participants. The cooperative principle and the four maxims provide rational tools for it. If an utterance is intended to be processed only in its literal meaning, then rationality, or more exactly, the fulfilling of the cooperative principle and its maxims is self-evident. But one can ask whether it is rational to convey information to be inferred, i.e., conversational implicatures in addition to the literal meaning of an utterance. In the course of working out a conversational implicature, the hearer starts out from the presumption that the speaker behaves cooperatively and observes the cooperative principle. If a conversational maxim seems not to be fulfilled, then this does not automatically count as the violation of a maxim. Instead, not fulfilling a maxim attracts the hearer's attention to infer a further meaning intended by the speaker, i.e., not fulfilling a maxim really is its exploitation in order to convey a conversational implicature. To transfer a covered, additional meaning by means of the literal meaning of an utterance explicitly expressed in a context, as well as relying on conversational presumptions, is a very economic—but unfortunately not very safe²⁴—way of information transmission. Consequently, a conversational exchange fulfilling the cooperative principle and, at the same time, exploiting a maxim can also be considered a kind of rational behaviour.

Establishing the cooperative principle and the maxims under it, as well as demonstrating how they operate in conversations, Grice (1975/1989) has started a research programme in pragmatics which has the primary aim of finding and describing the rational tools and manners of effective information transfer in human cooperative verbal and nonverbal behaviour.²⁵ However, one cannot forget about the fact that Grice

²³ Implicatures which can be intuitively grasped but cannot be worked out in the above-mentioned way do not count as conversational implicatures, they are conventional implicatures (Grice 1975/1989, 31).

²⁴ This kind of information transmission can be unsafe, or, in other words, not successful. It can happen that the communicative partner does not infer any conversational implicatures, or he/she infers conversational implicatures not intended by the speaker.

²⁵ At this point of the paper I do not differentiate between communication and information conveying. If we study Grice's theory from the point of view of

(*ibid.*, 28) supposes all sorts of other maxims such as e.g., be polite. Aesthetic, social or moral maxims are also fulfilled in the conversations and they may also induce implicit inferences, i.e., they may generate conversational implicatures. Grice's maxims are proposed to guide maximally effective exchange of information,²⁶ therefore he (*ibid.*, 28) admits that his maxims need to be generalized to allow for more general purposes such as influencing others' actions.

4.1.2. Leech's politeness principle

The other classic principle of the pragmatics literature, namely the politeness principle (Leech 1983), focuses on the social aspects of verbal communication and prescribes for the communicative partners how to communicate in order to maintain and care for the polite interpersonal relation between them. Leech (*ibid.*, 81) formulates the politeness principle both in a negative and a positive form, prescribing what not to say as well as what to say in order to be polite.²⁷

(2) (a) POLITENESS PRINCIPLE IN THE NEGATIVE FORM:

Minimize (other things being equal) the expression of impolite beliefs.

(b) POLITENESS PRINCIPLE IN THE POSITIVE FORM:

Maximize (other things being equal) the expression of polite beliefs.

Leech (*ibid.*, 131–51) introduces seven specific maxims (tact, generosity, approbation, modesty, agreement, sympathy and phatic maxims)²⁸ in order to make explicit what it exactly means to be adequately polite in a Gricean cooperative conversation. Politeness maxims concern the relationship between two participants in conversation whom Leech calls *self* (normally identified with the speaker) and *other* (normally identified

explanatory adequacy, we can meet with several problems. For these problems, see e.g., Kempson (1975) and Kiefer (1979).

²⁶ Effective exchange of information means the exchange of information on objects in Gricean theory.

²⁷ The verb *say* is not used here as a Gricean term but in its everyday meaning.

²⁸ The phatic maxim is not included in the enumeration of politeness maxims at the beginning of the chapter cited here (cf. Leech 1983, 132), but it is not surprising that after the elaboration of maxims it appears in the table summarizing principles and maxims which are important in the interpersonal rhetoric at the end of the chapter (cf. Leech *ibid.*, 149).

with the hearer).²⁹ Not going into the details of the characterization of maxims, it is worth noting that Leech does not evaluate all of the maxims as equally important. The importance of maxims is influenced by general considerations and expectations that (i) politeness focuses more strongly on other than on self, (ii) negative politeness is a more weighty constraint than positive politeness, and, furthermore, (iii) politeness towards the hearer is more important than politeness towards a third party. Taking into account these general considerations and fulfilling maxims result in a polite conversation.

In addition to the politeness and cooperative principles, Leech (1983) proposes other principles as well. The irony principle makes it possible to avoid open conflicts in social relations by using irony, the banter principle marks a playful relatedness between participants, the interest principle prescribes to be unpredictable, and, finally, the Pollyanna principle postulates that participants in a conversation prefer pleasant topics to unpleasant ones.

There are interesting theoretical questions with regard to what relations the above-mentioned principles and maxims have to each other and whether they have identical and equal theoretical status in the description of the operation of polite conversations. The seven maxims established by Leech are ordered under the politeness principle in the same way as the four Gricean maxims are supervised by the cooperative principle. The politeness and cooperative principles are situated at the same level in the course of language use together with the interest principle and the Pollyanna principle. These first-order principles govern polite language use in communication directly. The irony and banter principles cannot influence language use directly, they rely upon the implicatures of the first-order principles, consequently they can be considered higher-order principles. The higher-order principles involve more indirectness in the working out of the utterance meaning. In spite of the difference between the first-order and the higher-order principles from the empirical point of view, all these principles have the same theoretical status in the description: they are not subordinated to each other (cf. Leech 1983, 149).

The principles and maxims mentioned above direct interpersonal rhetoric.³⁰ Interpersonal rhetoric focuses on goal-oriented speech situa-

²⁹ Of course, speakers also show politeness to third parties who are not necessarily present in the speech situation (Leech 1983, 131).

³⁰ The other component of classic rhetoric, i.e., textual rhetoric, has no importance for the present argumentation.

tions, in which the participants use language in order to reach particular effects in the partners' mind. Notice that this interpretation of interpersonal rhetoric is not far from the Gricean notion of rationality. I will return to this observation in subsection 4.1.3 and section 5.

In summary: Leech has started another important research programme in pragmatics by studying the role of politeness in interpersonal rhetoric. This research programme has the primary purpose to describe the norms of politeness in everyday communication in addition to the rationality considerations emphasized by Grice.

4.1.3. Problems with Grice's and Leech's theories

There are at least two serious problems from the point of view of the present paper with Grice's (1975/1989) and Leech's (1983) theories which have to be mentioned: 1. neither the cooperative principle and its maxims nor the politeness principle and its maxims are defined exactly, and 2. neither Grice nor Leech give an explicit, complete model of communication (cf. Kiefer 1979; Németh T. 1996, 11–2; Sperber–Wilson 1986/1995, 28–38).³¹ The Gricean model concentrates on the hearer's side, how a hearer infers the intended speaker's meaning by recovering conversational implicatures, and it does not deal with the question of how the linguistic meaning of a sentence can serve as a basis for conversational implicatures to be inferred. The politeness model emphasizes the interpersonal character of the communicative interaction, it investigates the tools of maintaining a polite communicative relation. The tools of politeness and manners of behaving politely in communication provide information on the persons participating in conversations and on the relationships between them. Although both Grice and Leech appreciate the other's principles, Grice is interested in characterizing effective information transmission on objects in communicative interactions, while Leech is interested in the interpersonal characteristics of conversations. Consequently, their models do not sufficiently describe communication.

The problems that emerge in connection with the cooperative and politeness principles were partly solved in the pragmatics literature by modifying them, and partly by introducing new principles.

³¹ As one of the reviewers of the present paper has noted, these two points are not problems with just Grice's and Leech's theories, they are commonly shared problems in pragmatics: there are no exact definitions of pragmatic terms and no complete theory of communication. One of the tasks of future pragmatics research is to solve these problems in order to become a more exact, formalizable discipline.

4.2. Further principles

4.2.1. Principles related to the Gricean theory

One of the developments of the Gricean theory can be found in Kasher's (1976) approach to everyday conversations. Kasher generalizes the Gricean categories from a philosophical point of view. He reduces the cooperative principle and its maxims to a unique rationality principle. This general rationality principle can be extended to explain not only cooperative communication but also all kinds of human intentional activity. However, it is worth noting that the reduction of the cooperative principle to a very general rationality principle is in full accordance with Grice's original idea. Grice (1975/1989, 29) himself assumes that the cooperative principle can be generalized to all forms of human social behaviour. Kasher's (*ibid.*, 205) rationality principle is formulated as (3).

(3) RATIONALITY PRINCIPLE:

Given a desired end, one is to choose that action which most effectively, and at least cost, attains that end, other things being equal.

The major presumption behind the rationality principle is that human beings are rational agents whose intentional actions aim to reach particular goals well-defined within a certain context. Goals, beliefs and attitudes in a given context are assumed to offer sufficient grounds for a satisfactory justification of the agents' rational behaviour. The presumption of rationality plays a very important role in the understanding of everyday human intentional activity, as well as in its theoretical description and explanation.³²

Another modification of the Gricean theory can be found in Horn's (1984/1998) theory of pragmatic inferences. Horn envisages a partial reductionist program by formulating his well-known Q(uality)- and R(elevance)-principles. Horn intends to define communication by means of necessary and sufficient conditions, taking into account the dynamism of communication, i.e., both the speaker's side and the hearer's side of the communication. He boils down the four Gricean maxims to the above two fundamental principles. Horn starts out from Zipf's (1949) and Martinet's (1962) functional economy considerations, from the principle of

³² The description of the operation of Kasher's (1976) extended rationality principle is very similar to the characterization of the relevance principles given by Sperber and Wilson (1986/1995). I will return to the similarities of the rationality principles and the relevance principles later.

least effort originally applied in historical linguistics to explain language change.³³ The speaker-based and the hearer-based formulations of the principle of least effort can conflict, i.e., be antinomic. For example, the interpretation of a linguistic expression the production of which needs less effort from the speaker may require more effort from the hearer. Or the opposite of this can also happen, and the use of a linguistic expression the interpretation of which costs less effort from the hearer's point of view may require more effort from the speaker's side. Horn (1984/1998, 384–8)³⁴ argues that these two antinomic forces and the interaction between them are responsible for generating Gricean conversational maxims, as well as for generating the schema and manners for pragmatic inferences, i.e., conversational implicatures. Applying a partly reductionist approach and taking into account the speaker-based and the hearer-based economy principles, Horn (*ibid.*, 385) proposes the following two principles instead of the Gricean four maxims:³⁵

(4) (a) Q-PRINCIPLE (HEARER-BASED):

Make your contribution sufficient (cf. Quantity₁). Say as much as you can (given R).

(b) R-PRINCIPLE (SPEAKER-BASED):

Make your contribution necessary (cf. Relation, Quantity₂, Manner).

Horn (1984/1998, 396–414) illustrates that the Q-principle and the R-principle only apparently conflict with each other by explaining several various synchronic and diachronic, grammatical and pragmatic phenomena. In Horn's opinion, there is a division of pragmatic labour between his two principles. This division of pragmatic labour helps to maintain an economic balance between the speaker and the hearer in the course of communication.

Levinson (1987/1998) also criticizes the Gricean theory, analysing the Q(antity)- and I(nformativeness)-implicatures both resulting from the Gricean quantity maxim. Studying the role played by Q- and I-implicatures in establishing the scope of negation and in the interpretation of scalar expressions, Levinson convincingly argues for the claim

³³ The principle of least effort concerns not only linguistic phenomena but also all kinds of human behaviour.

³⁴ The page numbers cited here refer to the 1998 edition.

³⁵ Horn indicates in brackets what Gricean maxims are reduced in the given principle.

that there is an anomaly between the two types of implicatures.³⁶ The anomaly between the Q- and I-implicatures can be solved by developing a more exact definition of informativeness in communication. Levinson (*ibid.*, 562) proposes the minimization principle, which can be considered a little controversial or even paradoxical at first glance. This principle regulates the economy of information processing in communication. The minimization principle is formed as in (5):

(5) MINIMIZATION PRINCIPLE:

Minimized forms get maximized interpretation. The less you say, the more you mean.

The minimization principle concerns the connection between the explicit linguistic expression and the pragmatic inferences derivable from its use in a given context. Levinson demonstrates and illustrates how the minimization principle works in three distinct research areas: in the Gricean inferential model, in conversation analysis and in syntax. The applicability of the minimization principle in syntax proves that principles originally used in the explanation of pragmatic phenomena can be used with considerable explanatory power in grammar as well.

In his latest grand-scale, inspiring book, Levinson (2000) gives a synthesis of the results of neo-Gricean pragmatics and develops a theory of generalized conversational implicatures. The concept of generalized conversational implicature is one of the Gricean notions, but only minimal attention was devoted to it in pragmatics. Levinson (*ibid.*, 21–7) assumes three levels of meaning: 1. sentence meaning, 2. utterance-token meaning and 3. a level of meaning between the first two, i.e., utterance-type meaning. Sentence meaning must be explicated by a grammar, utterance-token meaning, or, in Gricean terms, speaker's meaning can be recovered by means of inferring particular conversational implicatures in accordance with the speaker's intentions in a given context. Gricean pragmatics with its cooperative principle and maxims explains how particular conversational implicatures can be inferred in a given context. At the level of meaning between sentence meaning and utterance-token meaning, i.e., in utterance-type meaning, systematic pragmatic inferences independent of particular contexts can be captured. These systematic pragmatic inferences are based on our general presumptions about how normal, usual,

³⁶ Q- and I-implicatures are widely studied in the post-Gricean literature. For the relevant works, see Levinson (1987/1998).

everyday communication works. Speech acts, Gricean conventional implicatures, felicity conditions, preference organizations of conversations, as well as generalized conversational implicatures discussed by Levinson in detail can be analysed at the level of utterance-type meaning. Levinson (*ibid.*, 73–164) considers generalized conversational implicatures to be default, stereotypical inferences generated by the operation of the following three principles:³⁷

(6) (a) Q(UANTITY)-PRINCIPLE:

Do not provide a statement that is informationally weaker than your knowledge of the world allows, unless providing an informationally stronger statement would contravene the I-principle.

(b) I(NFORMATIVENESS)-PRINCIPLE:

Say as little as necessary, i.e., produce the minimal linguistic information sufficient to achieve your communicational ends (bearing Q in mind).

(c) M(ANNER)-PRINCIPLE:

Indicate an abnormal, nonstereotypical situation by using marked expressions that contrast with those you would use to describe the corresponding normal, stereotypical situation.

In order to illustrate what kind of generalized conversational implicatures can be induced by the principles in (6), consider the examples in (7):

(7) (a) *Some of the girls came.* (Scalar) generalized conversational implicature induced by the Q-principle: 'Not all of the girls came.'

(b) *Peter and Mary bought a house.* Generalized conversational implicature induced by the I-principle: 'Peter and Mary bought the house together.'

(c) *Charles had enough money to travel to London.* Generalized conversational implicature induced by the M-principle: 'Charles didn't travel to London.'

Levinson (2000) also demonstrates that generalized conversational implicatures can be cancelled by once inferences, i.e., particular conversational implicatures, as well as by information explicitly expressed in the utterance. The deletion processes are governed by the same principles that induce generalized conversational implicatures. Consequently, Q-, I- and M-principles express, on the one hand, relations between generalized conversational implicatures (utterance-type meanings) and particular con-

³⁷ Levinson formulates his Q-, I- and M-principles in greater detail. He takes into account both the speaker's and hearer's interests. The speaker-based formulation of the principles in (6) is also part of Levinson's definition, and it is enough to cite only them for the purposes of the present paper.

versational implicatures (utterance-token meanings), and, on the other hand, relations between generalized conversational implicatures and the explicit linguistic meaning (sentence meaning) as well.

It is Gricean pragmatics that also serves as a starting-point for another current pragmatic theory, namely for relevance theory as developed by Sperber and Wilson (1986/1995). However, relevance theory differs from the above-mentioned neo-Gricean pragmatic theories, which can be easily related to each other. Sperber and Wilson do not only modify or reduce the Gricean cooperative principle and the maxims under it, but they also introduce a new principle which is a non-prescriptive generalization about communication instead of the normative principles.³⁸ Sperber and Wilson's (*ibid.*, 158) communicative principle of relevance is given in (8):

(8) COMMUNICATIVE PRINCIPLE OF RELEVANCE:

Every act of ostensive communication communicates a presumption of its own optimal relevance.

Before generally characterizing the way the communicative principle of relevance operates, the terms used in the definition must be explained. First, let us see the term *ostensive communication*. Sperber and Wilson (1986/1995, 63) define it as follows:

(9) OSTENSIVE-INFERENTIAL COMMUNICATION:

The communicator produces a stimulus which makes it mutually manifest to communicator and audience that the communicator intends, by means of this stimulus, to make manifest or more manifest to the audience a set of assumptions $\{I\}$.

Two kinds of intentions are hidden in the definition in (9). The first one concerns the information $\{I\}$ itself to be transferred in communication (cf. (10a)), and the second one concerns the intention to inform the communicative partner on $\{I\}$ (cf. (10b)).

(10) (a) INFORMATIVE INTENTION:

to make manifest or more manifest to the audience a set of assumptions $\{I\}$ (Sperber – Wilson 1986/1995, 58).

(b) COMMUNICATIVE INTENTION:

to make it mutually manifest to audience and communicator that the communicator has this informative intention (Sperber – Wilson *ibid.*, 61).

³⁸ For empirical tests of relevance theory, see Happé (1993) and Noveck–Sperber (2004).

The information the communicator wants to convey is a set of assumptions $\{I\}$. By assumptions, Sperber and Wilson mean thoughts treated by an individual as representations of the actual world. The facts of the actual world—represented by assumptions—are manifest to an individual at a given time if the individual is capable at that time of representing them mentally and accepting their representations as true or probably true (Sperber–Wilson 1986/1995, 2, 39). In ostensive-inferential communication communicators fulfil their intentions by means of some kind of ostensive behaviour. Communicators behave in such a way that their partners could observe their intention to transfer information. Observing communicators' ostensive behaviour, communicative partners make inferences with regard to the communicators' intentions and process the intended information.

The term *presumption of optimal relevance* in the formulation of the communicative principle of relevance has not been defined yet. The optimal relevance of an ostensive stimulus refers to the economy balance between the effects reached by it and the efforts needed to process it. More exactly, an ostensive stimulus is relevant optimally, on the one hand, if it is relevant enough for it to be worth the addressee's effort to process it. And on the other hand, an ostensive stimulus is relevant optimally if it is the most relevant one compatible with the communicator's abilities and preferences (Sperber–Wilson 1995, 270).³⁹ An ostensive stimulus is always presumed to be relevant, otherwise participants of the communicative interaction do not bother to process it.

Sperber and Wilson apply the communicative principle of relevance not only to explain ways of inferring information implicitly transmitted in the communication but also to recover the complete communicated meaning, as well as to define the linguistic meaning as part of the complete communicated information. With this approach Sperber and Wilson, first, eliminate the one-sidedness of previous models of communication, which either focused only on the linguistic meaning as code-models (e.g., the Jakobsonian model) did, or concentrated on the implicit information inferred by communicative partners as the Gricean model did. And second, they demonstrate that inferential processes are also indispensable

³⁹ It can be seen that the term *relevance* used by Sperber and Wilson differs from the Gricean maxim of relation to a great extent.

for constructing the linguistic (in a relevance theoretical term, explicit) meaning.⁴⁰

Sperber and Wilson have considered communication an important sub-case of human cognition since the very first formulation of relevance theory. Therefore, it is hardly surprising that the authors apply a reduction to the communicative principle of relevance and refer the presumption of relevance to all human cognition. Accordingly, in the second summary of the theory they formulate the cognitive principle of relevance, as in (11).

(11) COGNITIVE PRINCIPLE OF RELEVANCE:

Human cognition tends to be geared to the maximization of relevance (Sperber – Wilson 1995, 260).

The cognitive principle of relevance states that the human mind tends to be organized not only to seek for relevance or to prove it, but human cognitive mechanisms are geared to maximize relevance. Maximizing relevance means that cognitive mechanisms try to process the most relevant information in the most relevant manner, i.e., they intend to achieve the greatest cognitive effect with the least processing effort.⁴¹

To summarize, both relevance principles are a kind of economy principle. The relevance principle cited in (8) refers to a particular form of human cognition, i.e., to communication. The other relevance principle cited in (11) is a very general principle which characterizes all human cognition. In contrast with the principles discussed above, neither the communicative principle of relevance, nor the cognitive principle of relevance are prescriptive in nature. Neither one is a norm to be observed, instead, they are generalizations about communication and cognition.

Because of restrictions on the scope of this paper, I will not investigate other principles which can also be connected to Gricean pragmatics. Therefore, I will now turn to the approaches related to the other classic principle, i.e., the politeness principle.

⁴⁰ The relation between the inferential processes and the explicit meaning of utterances are analysed and illustrated in Bibok (2003).

⁴¹ For a discussion of the biological and cognitive motivation of the cognitive principle of relevance, see Sperber – Wilson (1995, 261–3).

4.2.2. Principles related to the politeness principle

Studying the role played by politeness in communicative language use, and, furthermore, in all kinds of social human behaviour, is one of the important and preferred research areas not only in linguistic pragmatics but also in social psychology.

Goffman (1955; 1959), one of the leading theoreticians in early social psychology, relates politeness to the concept of face. Goffman (1955, 5) defines face as the positive value a person effectively claims for himself/herself by the line others assume he/she has taken during a particular interaction. Face is an image of the self. Since face includes positive social attributes and values, politeness can be understood as the mutual intention to maintain these positive social values, i.e., to save each other's face in communication. Although Goffman has not formulated face saving briefly and explicitly similarly to principles analysed in the previous sections, the main content of face saving can be summarized as follows:

(12) PRINCIPLE OF FACE SAVING:

Save your own and your partner's face in communication.

It is a universally accepted aspiration that participants in communication save not only their own faces but also their partners'. Communicators try to avoid performing speech acts endangering faces of their partners, such as e.g., requests, or even threatening partners' faces, such as commands.⁴² If communicators still have to perform face endangering or threatening speech acts, they necessarily try to reduce the extent of endangering or threatening by using various politeness formulas, indirect speech acts, as well as by enlarging options of how partners can react.

Similarly to the maxims of Gricean pragmatics, Lakoff (1973; 1979) defines the norms of politeness before the formulation of Leech's (1983) politeness theory.⁴³ Lakoff proposes a main principle to guide polite verbal behaviour in the same way as Grice proposes a main principle—the

⁴² If the communicator asks his/her partner to do something, he/she assumes that the partner would not perform the requested action in the normal circumstances, in the normal flow of events. The communicator assumes that an intention to perform the requested action is not included in the partner's face. That is why requests (and their strongest forms, commands) can be considered face endangering or threatening speech acts.

⁴³ Lakoff's politeness theory has not become known so widely as Leech's theory has, therefore I have labelled Leech's politeness principle as a classic principle and discussed it earlier, before Lakoff's norms.

cooperative principle—to govern rational cooperative behaviour. Lakoff considers politeness a device used in order to reduce frictions and conflicts in personal interactions. She characterizes her politeness principle by means of three maxims ordered under it (Lakoff 1973), given in (13).

(13) POLITENESS PRINCIPLE: Be polite.

- Maxims: 1. Do not impose (used when formal/impersonal politeness is required).
 2. Give options (used when informal politeness is required).
 3. Make a partner feel good (used when intimate politeness is required).

The maxims in (13) are applicable more or less depending on the context and politeness situation as understood by the communicator. The first maxim assumes a more formal relation between the participants than the second and the third maxims. There is a more personal relation between the participants under the second, and, further, the third maxim. While the Gricean cooperative principle and the four maxims under it have to be observed all together at the same time, Lakoff's maxims originally refer to different situations.

Schlenker (1980) further develops Goffman's line of research in social psychology, investigating what principles govern human social behaviour. One of the central categories of his theory is impression management. Schlenker (*ibid.*, 6) defines impression management as the conscious or unconscious attempt of participants to control images projected in real or imagined social interactions. According to this notion of impression management, Schlenker (*ibid.*, 105–10) supposes an association principle to regulate human social behaviour in interactions:

(14) ASSOCIATION PRINCIPLE:

People claim desirable images and avoid claiming undesirable ones.

In other words: people want to establish their personal association with desirable images and disestablish their personal association with undesirable ones. The association principle is followed by communicative partners in the way that they try to maximize the attractiveness of their acquired properties, relations etc., and, at the same time, they try to minimize antipathy towards them (Nemesi 2000, 420). The association principle regulates, on the one hand, self-expression and self-projection, and, on the other hand, solidarity with the partners in social interactions.

Another theory of interpersonal relations, namely Brown and Levinson's (1978; 1987) politeness theory also relies on social psychology, especially on Goffman's approach, but it is much more of a linguistic prag-

matic theory than merely a social psychological one. Brown and Levinson aim to reveal, first, what strategies are applied by communicative partners in their conversations, and, second, what linguistic forms can be used to perform politeness strategies.⁴⁴ Politeness strategies originate in Goffman's face, but Brown and Levinson divide it into two parts. The first component of the face, i.e., the negative face, refers to people's desire that other people do not prevent them in their actions, whereas the other component, i.e., positive face, includes people's desire that their wishes, aims, attitudes etc. would be desirable for others as well. Politeness strategies help to construct and save negative and positive face in social interactions. Similarly to the formulation of Goffman's principle of face saving given in (12), the underlying principle of politeness strategies proposed by Brown and Levinson (1978; 1987) can be summarized and generalized as follows:⁴⁵

(15) UNDERLYING PRINCIPLE OF POLITENESS STRATEGIES:

Save your own and your partner's negative and positive face in communication.

Similarly to the above-mentioned theories based on social psychological considerations, Nemesi (1997/1998; 2000) also intends to unify approaches to self expression and linguistic pragmatic principles in the course of analysing linguistic aspects of impression management. He assumes a more specific version of the association principle (cf. (14)) concentrating on verbal communication, the relevant form of social interactions from the linguistic point of view (Nemesi 2000, 426).

(16) PRINCIPLE OF LINGUISTIC IMPRESSION MANAGEMENT:

In verbal interactions people try to present themselves linguistically in such a way that they would like to be seen in.

The principle of linguistic impression management makes a generalization that people consciously or unconsciously try to influence their partners' opinion about them in accordance with their desires in conversations. Participants in conversations want to achieve this aim by means of choosing particular linguistic forms or by using particular linguis-

⁴⁴ It must be admitted that Brown and Levinson (1978; 1987) do not differentiate politeness strategies and the linguistic forms by which politeness strategies are performed consequently.

⁴⁵ For an application to Hungarian data of Brown and Levinson's politeness theory, see e.g., Síklaki (1994, 151–72).

tic forms according to their desires. Although impression management is a universal phenomenon, strategies performing linguistic impression management can be considered language- and culture-specific, and even context-dependent in the same way as politeness strategies in Brown and Levinson's (1978; 1987) theory. Nemesi (2000, 426–33) establishes various sub-strategies of linguistic impression management and illustrates them by data from Hungarian communicative language use. He mentions, for example, identifying oneself emotionally with the partner, maintaining partner's interest, focusing on highly accepted social values, and avoiding or at least reducing undesirable consequences of faults and mistakes.

The literature on politeness and related phenomena could be treated further. Kasper's (1996) paper provides an excellent summary of the latest developments in the study of the field. However, it can be seen from the brief synopsis of the theories given in the present article that two distinct approaches can be differentiated with respect to how politeness operates in social interactions. The first approach prescribes how to behave politely in communication by means of maxims, and the second one generalizes strategies of how people behave in order to be polite in communication.

After the above brief and very general overview of principles of communicative language use, the next section is intended, first, to evaluate the principles independently of any particular pragmatic theory, and, second, to re-evaluate them relying on the definition of ostensive-inferential communication.

5. An evaluation and re-evaluation of the principles of communicative language use

5.1. A theory-independent evaluation of principles

The principles mentioned in section 4 can be divided into two main groups in a natural manner inspired by their character and important empirical generalizations that can be made about them. The first group includes rationality principles, and the second group contains interpersonality principles. Let us evaluate rationality principles first.

5.1.1. Rationality principles

The rationality principles in the first group concern the economy of communicative interactions. Some of them, namely the Gricean (1975/1989) cooperative principle, Kasher's (1976) rationality principle, Horn's (1984/1998) Q- and R-principles, Levinson's (1987/1998) minimization principle are pragmatic principles governing information transmission in communication. They play a crucial role mostly in recovering information implicitly conveyed by communicators, i.e., conversational implicatures. Kasher's (1976) rationality principle can be considered more general than the other principles because it is intended to explain all kinds of rational and intentional human activity.⁴⁶ However, Kasher (*ibid.*) demonstrates how the rationality principle works by analysing information transmission in communication.

The rationality principles also intrude into the domain of grammar, consequently, they start becoming both pragmatic and grammatical principles. The intrusion of rationality principles into grammar can be illustrated, for example, by applying Horn's (1984/1998) Q- and R-principles in the syntax and the historical linguistic explanation of language change; Sperber and Wilson's (1986/1995) communicative principle of relevance in the construction of utterance meaning, and Levinson's (2000) Q-, I- and M-principles in the syntax, at the semantics-pragmatics interface and in historical linguistics. It has to be emphasized that the Q-, I- and M-principles are indispensable for explaining generalized conversational implicatures at the semantics-pragmatics interface at the new level of meaning between sentence meaning and utterance-token meaning as suggested by Levinson (2000).

With regard to the rationality principles concerning the economy of communication, it is worth noting once again that Kasher's (1976) rationality principle, as well as Sperber and Wilson's (1995) cognitive principle of relevance are valid not only for verbal communication but also for all forms of language use. And furthermore, Kasher's principle refers to all kinds of intentional human activity—as was mentioned above—, while the cognitive principle of relevance refers to all human cognition.

⁴⁶ The economy principle of least effort proposed by Zipf (1949) which serves as a basis for Horn's and Levinson's principles also has a wider scope, referring to the whole of the human universe.

The Gricean (1975/1989) cooperative principle, Kasher's (1976) rationality principle, Horn's (1984/1998) Q- and R-principles, Levinson's (1987/1998) minimization principle and Levinson's (2000) Q-, I- and M-principles form norms to be observed in communication according to the third interpretation of the term *principle*, so they have a prescriptive power. The remaining rationality principles treated here, i.e., Sperber and Wilson's (1995) communicative and cognitive principles of relevance do not have a normative character, they are descriptive generalizations according to the fourth interpretation of the term *principle* demonstrated in section 3.2.

5.1.2. Interpersonality principles

The other group contains principles which concern interpersonal relations in communication and various forms of polite social behaviour, as well as the self-projection of the communicative partners. Some interpersonality principles, such as Lakoff's (1973; 1979) politeness principle and Leech's (1983) politeness principle, can be closely connected to Gricean maxim-based pragmatics, they are prescriptions for how to behave politely. The other interpersonality principles have completely—like Goffman's (1955; 1959) principle of face saving and Schlenker's (1980) association principle—or partly—like Brown and Levinson's (1978; 1987) politeness strategies and Nemesi's (1997/1998; 2000) principle of linguistic impression management—a social psychological origin. The politeness principles and maxims related to Gricean pragmatics, i.e., Lakoff's and Leech's principles, as well as Goffman's principle of face saving and Schlenker's association principle from the social psychological approaches, operate as normative, prescriptive constraints, so they belong to the third interpretation of the term *principle*. Unlike these principles, Brown and Levinson's (1978; 1987) politeness strategies and Nemesi's (1997/1998; 2000) strategies of linguistic impression management can be evaluated as empirical generalizations about how people behave in verbal social interactions, consequently one can see the fourth interpretation possibility of *principle* in these latter works.

Criticizing the two classic principles, I have already emphasized in section 4.1.3 that one cannot find an explicit definition of communication underlying them. In the rest of the present paper, I will take an explicit definition, namely Sperber and Wilson's (1986/1995) definition of ostensive-inferential communication, apply it to verbal communication, and, relying on it, re-evaluate principles of communicative language

use. Finally, in the course of re-evaluating the principles surveyed, I will demonstrate how they can be reduced to a very general rationality principle, i.e., the cognitive principle of relevance.

5.2. Application of the definition of ostensive-inferential communication

I have already cited the definition of ostensive-inferential communication in section 4.2.1 in (9), but in order to make my argumentation easier to follow I repeat it here as (17):

(17) OSTENSIVE-INFERENTIAL COMMUNICATION:

The communicator produces a stimulus which makes it mutually manifest to communicator and audience that the communicator intends, by means of this stimulus, to make manifest or more manifest to the audience a set of assumptions $\{I\}$.

Verbal communication is the most important form of ostensive-inferential communication for a linguist. In verbal communication the communicator, i.e., the speaker/writer produces a linguistic stimulus consisting of either acoustic or graphic signs (verbal ostension) in order to attract the partner's, i.e., hearer's/reader's, attention and to provide him/her with some kind of information. The communicator fulfils both ostension and encoding. The communicative partner must process the linguistic stimulus and recover the implicit information and the communicator's informative intention. The partner must apply both decoding and inferential procedures to fulfil these tasks. Applying this approach to verbal communication, one can easily conclude why the previous models of verbal communication were not adequate to explain it: code-models (e.g., the Jakobsonian model) and inferential models (e.g., the Gricean model) treated only one or the other side or procedure of verbal communication (cf. Németh T. 1990; 1996).

The majority of principles assumed by the pragmatics and social psychology literature refer to communicative language use, i.e., to verbal communication. Let us re-evaluate these principles relying on the characterization of verbal communication provided in the previous paragraph.

5.3. A re-evaluation of the rationality and interpersonal principles on the basis of verbal ostensive-inferential communication

Notice that with the help of the definition of ostensive-inferential communication information transmission and communication can and must be distinguished. As we have seen in (10a–b) in section 4.2.1, there are two intentions hidden in the definition of ostensive-inferential communication. One is informative intention according to which a person wants to inform another person about something. One can have informative intention without having an intention to make it manifest to the other person. The other intention, included in the definition, is communicative intention, i.e., the communicator's intention to make his/her informative intention mutually manifest to the partner and himself/herself. Communicative intention presupposes having informative intention. One cannot have communicative intention without having informative intention. Consequently, communication always includes information transmission, but not all kinds of information transmission can be considered communication. Information transmission can operate without communicative intention.⁴⁷

Starting out from the definition of ostensive-inferential communication, it can be stated that most of the rationality principles—Grice's (1975/1989) cooperative principle, Kasher's (1976) rationality principle, Horn's (1984/1998) Q- and R-principles, Levinson's (1987/1998) minimization principle, Levinson's (2000) Q-, I- and M-principles—and all interpersonal principles—Leech's (1983) politeness principle, Goffman's (1955; 1959) principle of face saving, Lakoff's (1973; 1979) politeness principle, Schlenker's (1980) association principle, Brown and Levinson's (1978; 1987) politeness strategies, Nemesi's (1997/1998; 2000) principle of linguistic impression management—refer to the content of the informative intention, i.e., to the set of assumptions $\{I\}$. The only exceptions to

⁴⁷ For a detailed analysis of distinguishing between communication and information transmission, see Németh T. (1996, 14); Ivaskó–Németh T. (2002). It would be important to investigate the relationship between information transmission and the other forms of language use. There are several important questions in this respect: 1. Are there any forms of language use without information transmission? 2. Is there any kind of hierarchy between various forms of language use? 3. What forms of language use can be derived from what forms of language use, for instance, can communicative language use be derived from verbal information transmission? However, to answer these questions further research would be necessary.

this generalization are the communicative (Sperber–Wilson 1986/1995) and cognitive (Sperber–Wilson 1995) principles of relevance.

The above-mentioned rationality principles, except the communicative and cognitive principles of relevance, guide information transmission (meaning construction) and processing (interpretation) with reference to the object. This kind of information, expressed explicitly or implicitly, is basically propositional in nature. Interpersonality principles concern the information transmission and processing on selves including the communicative partners' desires, wishes, intentions, aims, etc. This kind of information does not necessarily have a propositional form, sometimes it can hardly be propositionalized. To summarize: both rationality and interpersonal principles refer to information transmission and processing. It has to be emphasized, again, that it is not necessary to have a communicative intention in order that these principles could operate, they can work both in information transmission without any communicative intention and in communication.

In the definition of ostensive-inferential communication, communicative intention must still be dealt with further. The characterization of communicative intention given by Sperber and Wilson (1986/1995, 61) (cf. (10b) in section 4.2.1) makes it possible to refer to the content of communicative intention by means of a principle operating in communication. Since in communication the communicator always has communicative intention according to the definition of ostensive-inferential communication, the principle referring to the communicative intention must be formulated in accordance with the fourth interpretation of the term *principle*. Let us call this principle the principle of communicative intention and formulate it as follows:

(18) PRINCIPLE OF COMMUNICATIVE INTENTION:

In communication, communicators intend to make their informative intentions mutually manifest.

As I have noted in section 1, Bach and Harnish (1979, 7) propose a communicative presumption not labelled "principle" which is similar to the principle of communicative intention in some respect.

(19) COMMUNICATIVE PRESUMPTION:

The mutual belief in C_L that whenever a member says something in L to another member H , he is doing so with some recognizable illocutionary content.⁴⁸

⁴⁸ C_L : linguistic community; L : language; H : hearer.

However, there is a great difference between Bach and Harnish's communicative presumption and the principle of communicative intention. Communicative presumption refers only to one kind of information, to illocutionary intention belonging to the content of the informative intention. The principle of communicative intention has a wider scope than communicative presumption, it refers to all kinds of information, to all possible content of the informative intention.

At the re-evaluation of interpersonal principles, we have considered people's intentions, desires, aims, attitudes, etc. which these principles concern as one kind of information. Therefore, conveying informative intention belongs to self-expression, and, consequently, the principle of communicative intention is an interpersonal principle. From this point of view, the principle of communicative intention is a higher-order principle, it must be ordered above rationality principles concerning information transfer on objects and interpersonal principles concerning information transmission on selves in the content of informative intention. The principle of communicative intention serves to make the intention to transfer both kinds of information—i.e., about objects and selves—mutually manifest. From another point of view, the principle of communicative intention can also be evaluated as a rationality principle because it refers to the transmission of informative intention which itself is a kind of information. Realize that the information conveyed by the principle of communicative intention forms a higher-level, additional range to the content of informative intention, and having his/her communicative intention the communicator makes all this information mutually manifest in ostensive-inferential communication.

A cognitive approach always studies information transmission from the point of view of effectiveness. Effectiveness in information transmission refers to whether the spent energy results in enough benefit. Sperber and Wilson (1986/1995) apply this approach to ostensive-inferential communication and formulate the communicative principle of relevance. The communicative principle of relevance states that every act of ostensive-inferential communication operates according to the effectiveness requirement (cf. (8) in section 4.2.1). It requires establishing a balance between the processing efforts and contextual effects achieved. Since (i) the communicative principle of relevance guarantees the effectiveness of information transmission in communication and (ii) most of the rationality principles (exceptions are the communicative and cognitive principles of relevance) and all interpersonal principles referring to informative in-

tention are tools of effective information exchange on objects and selves, one can conclude that the communicative principle of relevance makes a generalization about the result of the operation of these principles, i.e., communication. Rationality and interpersonality principles can be considered particular, partial manifestations of the communicative principle of relevance—which itself is a rationality principle—, they can be reduced to it.

Continuing this line of thinking, we can say that since communication usually is considered one of the most important particular forms of human cognition, generalizations about cognition—e.g., the cognitive principle of relevance—must be valid for it as well. The cognitive principle of relevance is a very general rationality principle. It is a generalization about how the human mind works: it tends to be geared to the maximization of relevance. This means that human cognition operates in the way that it could achieve the most cognitive effects (benefit) with the least processing effort (energy cost). Since (i) communication is a very frequent particular form of human cognition about which the communicative principle of relevance makes an important generalization and (ii) the cognitive principle of relevance makes a generalization about how human cognition operates, it can be concluded that the communicative principle of relevance is a particular, partial manifestation of the cognitive principle of relevance: the communicative principle of relevance can be reduced to the cognitive principle of relevance. Notice that two reductions have been made: 1. most of the rationality principles (Grice's cooperative principle, Kasher's rationality principle, Horn's Q- and R-principles, Levinson's minimization principle, Levinson's Q-, I-, M-principles, and the principle of communicative intention suggested in (18)) and all interpersonality principles (Leech's politeness principle, Goffman's principle of face saving, Lakoff's politeness principle, Schlenker's association principle, Brown and Levinson's politeness principles, Nemesi's principle of linguistic impression management, and the principle of communicative intention suggested in (18)) working in communicative language use have been reduced to the communicative principle of relevance, and 2. the communicative principle of relevance has been reduced to the cognitive principle of relevance. Thus, to summarize, we can claim that all the principles treated above can be reduced to a very general rationality principle, i.e., to the cognitive principle of relevance.

Finally, two remarks seem to be in order with respect to Kasher's (1976) rationality principle (cf. (3): Given a desired end, one is to choose

that action which most effectively, and at least cost, attains that end, other things being equal). Extending it to all kinds of intentional human activity results in a principle which is more general than the communicative principle of relevance, because it concerns not only communication but also all forms of language use and other intentional activity. Consequently, the communicative principle of relevance—together with all principles reduced to it—can be reduced to the Kasher's extended rationality principle. At the same time, this extended principle is less general than Sperber and Wilson's (1995) cognitive principle of relevance because the latter refers to all procedures and operations of cognition, while Kasher's extended rationality principle concerns only intentional actions. So, Kasher's extended rationality principle—together with all principles reduced to it—can be reduced to the cognitive principle of relevance.

6. Summary

In the present paper I have studied principles of communicative language use. After completing the preliminary tasks described in section 1.1, first, I have characterized and evaluated some typical principles of communicative language use treated by the relevant literature in their own theoretical frameworks. Then, I have demonstrated that principles can be separated into two groups, into rationality principles and interpersonal principles, in a natural manner, independently of the particular theoretical framework.

Second, I have re-evaluated the principles and I provided a new classification for them, relying on the definition of ostensive-inferential communication. I have demonstrated that rationality principles (which concern information transmission on objects) and interpersonal principles (which refer to information transmission on selves) can be considered tools of effective information transmission. On the basis of the definition of ostensive-inferential communication, I have also formulated the principle of communicative intention, which can be understood both as an interpersonal principle and as a rationality principle.

Third, I have supported the plausibility of the fact that all principles can be reduced to a very general rationality (economy) principle, i.e., the cognitive principle of relevance.

Finally, I have also emphasized that the principles considered communicative ones in the pragmatics literature are really principles of effective information transmission either on objects or on selves, i.e., they play

a considerable role in verbal information transmission without a communicative intention. So they are valid at least in two forms of language use: in the informative and the communicative ones. The only principles which refer only to communicative language use are Sperber and Wilson's (1986/1995) communicative principle of relevance and the principle of communicative intention suggested in the present article.

The detailed analysis and the demonstration of whether the cognitive principle of relevance has the same descriptive and explanatory power or an even greater one than the reduced principles have will be the task of further research.

References

- Bach, Ken – Robert M. Harnish 1979. *Linguistic communication and speech acts*. MIT Press, Cambridge MA.
- Bibok, Károly 2003. A szójelentés lexikai pragmatikai megközelítése [A lexical pragmatic approach to word meaning]. In: *Általános Nyelvészeti Tanulmányok* 20: 37–77.
- Bierwisch, Manfred 1980. Semantic structure and illocutionary force. In: John R. Searle – Ferenc Kiefer – Manfred Bierwisch (eds): *Speech act theory and pragmatics*, 1–37. D. Reidel, Dordrecht.
- Bierwisch, Manfred 1983. Major aspects of the psychology of language. In: Manfred Bierwisch: *Essays in the psychology of language*. *Linguistische Studien A* 114, 1–39. ZISW, Berlin.
- Brown, Penelope – Stephen Levinson 1978. Universals in language usage: politeness phenomena. In: Esther N. Goody (ed.): *Questions and politeness: strategies in social interaction*, 56–289. Cambridge University Press, Cambridge.
- Brown, Penelope – Stephen Levinson 1987. *Politeness: some universals in language usage*. Cambridge University Press, Cambridge.
- Carston, Robyn 2000. The relationship between generative grammar and (relevance-theoretic) pragmatics. In: *Language and Communication* 20: 87–103.
- Chomsky, Noam 1965. *Aspects of the theory of syntax*. MIT Press, Cambridge MA.
- Chomsky, Noam 1977. *Essays on form and interpretation*. North Holland, New York.
- Chomsky, Noam 1995. *The minimalist program*. MIT Press, Cambridge MA.
- É. Kiss, Katalin 1998. Mondattan [Syntax]. In: Katalin É. Kiss – Ferenc Kiefer – Péter Siptár: *Új magyar nyelvtan* [A new Hungarian grammar], 15–184. Osiris Kiadó, Budapest.
- É. Kiss, Katalin 2003. Mondattan [Syntax]. In: Ferenc Kiefer – Péter Siptár (eds): *A magyar nyelv kézikönyve* [Handbook of the Hungarian language], 205–41. Akadémiai Kiadó, Budapest.
- Fodor, Jerry 1983. *The modularity of mind*. MIT Press, Cambridge MA.

- Fodor, Jerry 2000. *The mind does not work that way*. MIT Press, Cambridge MA.
- Goffman, Erving 1955. On face-work: an analysis of ritual elements in social interaction. In: *Psychiatry* 18:213–31.
- Goffman, Erving 1959. *The presentation of self in everyday life*. Doubleday Anchor, Garden City.
- Grice, H. Paul 1957/1989. Meaning. In: *Philosophical Review* 67:377–88. Reprinted in: Grice (1989:211–23).
- Grice, H. Paul 1968/1989. Utterer's meaning, sentence-meaning, and word-meaning. In: *Foundations of Language* 4:225–42. Reprinted in: Grice (1989:117–37).
- Grice, H. Paul 1975/1989. Logic and conversation. In: Peter Cole – Jerry L. Morgan (eds): *Syntax and semantics*, vol. 3: *Speech acts*, 41–58. Academic Press, New York. Reprinted in: Grice (1989:22–40).
- Grice, H. Paul 1989. *Studies in the way of words*. Harvard University Press, Cambridge MA.
- Happé, Francesca 1993. Communicative competence and theory of mind in autism: a test of relevance theory. In: *Cognition* 48:101–19.
- Hjelmslev, Louis 1929. *Principes de grammaire générale*. Munksgaard, Copenhagen.
- Hjelmslev, Louis 1953. *Prolegomena to the theory of language*. University of Wisconsin Press, Madison.
- Horn, Larry 1984/1998. Toward a new taxonomy for pragmatic inference: Q- and R-based implicatures. In: Deborah Schiffrin (ed.): *Meaning, form, and use in context*, 11–42. Georgetown University Press, Washington DC. Reprinted in: Kasher (1998:383–418).
- Hymes, Dell 1972. On communicative competence. In: John Bernard Pride – Janet Holmes (eds): *Sociolinguistics*, 269–93. Penguin, Harmondsworth.
- Ivaskó, Livia 2002. Az afáziás nyelvhasználat sikertelenségének okairól [Reasons of communicative failure in aphasic language use]. In: Mihály Racsmány – Szabolcs Kéri (eds): *Architektúra és patológia a megismerésben* [Architecture and pathology in cognition], 40–51. Books in Print, Budapest.
- Ivaskó, Livia – Enikő Németh T. 2002. Types and reasons of communicative failures: a relevance theoretical approach. In: *Modern Filológiai Közlemények* 4:31–43.
- Kasher, Asa 1976. Conversational maxims and rationality. In: Asa Kasher (ed.): *Language in focus: foundations, methods and systems*, 197–216. D. Reidel, Dordrecht.
- Kasher, Asa 1986. Pragmatics and Chomsky's research program. In: Asa Kasher (ed.): *The Chomskyan turn*, 122–49. Blackwell, Cambridge MA & Oxford.
- Kasher, Asa 1991. On the pragmatic modules: a lecture. In: *Journal of Pragmatics* 16:381–97.
- Kasher, Asa (ed.) 1998. *Pragmatics I: critical concepts*. Routledge, London.
- Kasper, Gabriele 1996. Politeness. In: Jef Verschueren – Jan-Ola Östman – Jan Blommaert – Chris Bulcean (eds): *Handbook of pragmatics: 1996 installment*, 1–20. Benjamins, Amsterdam.
- Kempson, Ruth M. 1975. *Presupposition and the delimitation of semantics*. Cambridge University Press, Cambridge.

- Kempson, Ruth M. 1996. Semantics, pragmatics, and natural-language interpretation. In: Shalom Lappin (ed.): *The handbook of contemporary semantic theory*, 561–98. Blackwell, Cambridge MA & Oxford.
- Kertész, András 2001. Nyelvészet és tudományelmélet [Linguistics and the theory of science]. *Nyelvtudományi Értekezések* 150. Akadémiai Kiadó, Budapest.
- Kiefer, Ferenc 1979. What do conversational maxims explain? In: *Linguisticae Investigationes* 3: 57–74.
- Lakoff, Robin 1973. The logic of politeness: or, minding your p's and q's. In: Claudia W. Corum–T. Cedric Smith-Stark–Ann Weiser (eds): *Papers from the Ninth Regional Meeting of the Chicago Linguistic Society*, 292–305. Chicago Linguistic Society, Chicago.
- Lakoff, Robin 1979. Stylistic strategies within a grammar of style. In: Judith Orasanu–Mariam Slater–Leonore Loeb Adler (eds): *Language, sex and gender*, 53–80. *The Annals of the New York Academy of Sciences*, New York.
- Leech, Geoffrey N. 1983. *Principles of pragmatics*. Longman, Harlow.
- Lerch, Ágnes 2002. Normatív argumentáció, argumentációs stratégia és az udvariasság elve [Normative argumentation, argumentative strategies and the politeness principle]. In: Márta Maleczki (ed.): *A mai magyar nyelv leírásának újabb módszerei V* [Recent methods in the description of contemporary Hungarian 5], 421–46. Szegedi Tudományegyetem, Szeged.
- Levinson, Stephen C. 1983. *Pragmatics*. Cambridge University Press, Cambridge.
- Levinson, Stephen C. 1987/1998. Minimization and conversational inference. In: Jef Verschueren–Marcella Bertucelli-Papi (eds): *The pragmatic perspective*, 61–129. Benjamins, Amsterdam. Reprinted in: Kasher (1998: 544–607).
- Levinson, Stephen C. 2000. *Presumptive meanings: The theory of generalized conversational implicature*. MIT Press, Cambridge MA.
- Lukács, Ágnes 2001. Szabályok és kivételek: a kettős modell érvényessége a magyarban [Rules and exceptions: the validity of the double model in Hungarian]. In: Csaba Pléh–Ágnes Lukács (eds): *A magyar morfológia pszicholingvisztikája* [The psycholinguistics of Hungarian morphology], 119–152. Osiris, Budapest.
- Martinet, André 1962. *A functional view of language*. Clarendon Press, Oxford.
- Mey, Jacob 1995. *Pragmatics: an introduction*. Blackwell, Cambridge MA & Oxford.
- Nemesi, Attila László 1997/1998. Miként viselkedünk a szavakkal? Benyomáskeltés és nyelvhasználat 1–2. rész [How to behave with words? Impression management and language use, parts 1 and 2]. In: *Magyar Nyelvőr* 121/122: 490–96/24–35.
- Nemesi, Attila László 2000. Benyomáskeltési stratégiák a társalgásban [Impression management strategies in conversation]. In: *Magyar Nyelv* 96: 418–36.
- Németh T., Enikő 1990. Az emberi kommunikáció kutatásának néhány alapkérdése [Some basic issues of the investigation of human communication]. In: *Néprajz és Nyelvtudomány* 33: 43–56.
- Németh T., Enikő 1994. Megnyilatkozás: típus-példány [Utterance: type vs. token]. In: *Néprajz és Nyelvtudomány* 36: 69–101.
- Németh T., Enikő 1996. A szóbeli diskurzusok megnyilatkozáspéldányokra tagolása [Segmentation of spoken discourses into utterance-tokens]. *Nyelvtudományi Értekezések* 142. Akadémiai Kiadó, Budapest.

- Németh T., Enikő 2003. A kommunikatív nyelvhasználat elvei [The principles of communicative language use]. In: *Általános Nyelvészeti Tanulmányok* 20: 221–54.
- Noveck, Ira – Dan Sperber (eds) 2004. *Experimental pragmatics*. Palgrave Macmillan, Basingstoke.
- Paradis, Michel 1998. The other side of language: pragmatic competence. In: *Journal of Neurolinguistics* 11: 1–10.
- Paul, Hermann 1874. *Prinzipien der Sprachgeschichte*. Niemeyer, Halle/Saale.
- Pinker, Steven 1994. *The language instinct*. William Morrow & Company, New York.
- Pléh, Csaba 2000a. A szabály fogalma Wittgenstein munkáiban és a mai pszicholingvisztikában [The notion of rule in Wittgenstein's works and in contemporary psycholinguistics]. In: *Kellék* 15–16: 81–100.
- Pléh, Csaba 2000b. Modularity and pragmatics: some simple and some complicated ways. In: *Pragmatics* 10: 415–38.
- Pléh, Csaba 2001. Szabályok és szokások: hogyan kezeli a mai kognitív kutatás a nyelvtan és az erkölcs kérdését [Rules and conventions: how current cognitive studies treat grammar and ethics]. In: *Magyar Filozófiai Szemle* 45: 417–24.
- Pléh, Csaba – Ágnes Lukács 2002. A szabályok és a kettős disszociációs elv a nyelv agyi reprezentációjában [Rules and the principle of double dissociation in the representation of language in the brain]. In: E. Szilveszter Vizi – Ferenc Altrichter – Kristóf Nyíri – Csaba Pléh (eds): *Agy és tudat [Brain and mind]*, 153–68. Books in Print, Budapest.
- Radford, Andrew 1997. *Syntax: a minimalist introduction*. Cambridge University Press, Cambridge.
- Reboul, Anne – Jacques Moeschler 1998. *La pragmatique aujourd'hui: une nouvelle science de la communication*. Éditions du Seuil, Paris.
- Rumelhart, David E. – James L. McClelland – The PDP Research Group 1986. *Parallel distributed processing: explorations in the microstructure of cognition 1. Foundations*. MIT Press, Cambridge MA.
- Schlenker, Barry R. 1980. *Impression management: the self-concept, social identity, and interpersonal relations*. Brooks/Cole, Monterey CA.
- Searle, John R. 1969. *Speech acts*. Cambridge University Press, Cambridge.
- Síklaki, István 1994. *A meggyőzés pszichológiája [The psychology of persuasion]*. Scientia Humana, Budapest.
- Smith, Neil 1999. *Chomsky: ideas and ideals*. Cambridge University Press, Cambridge.
- Sperber, Dan 2000. Metarepresentations in an evolutionary perspective. In: Dan Sperber (ed.): *Metarepresentations: a multidisciplinary perspective*, 117–37. Oxford University Press, Oxford.
- Sperber, Dan – Deirdre Wilson 1986/1995. *Relevance: communication and cognition*. Blackwell, Cambridge MA & Oxford. 1st/2nd edition.
- Sperber, Dan – Deirdre Wilson 2002. Pragmatics, modularity and mind-reading. In: *Mind and Language* 17: 3–23.
- Taylor, Talbot J. – Deborah Cameron 1987. *Analysing conversation: rules and units in the structure of talk*. Pergamon Press, Oxford.

Zipf, George Kingsley 1949. Human behavior and the principle of least effort. Addison-Wesley, Cambridge MA.

Address of the author: Enikő Németh T.
Department of General Linguistics
University of Szeged
Egyetem utca 2.
H 6722 Szeged
Hungary
nemethen@hung.u-szeged.hu

BOOK REVIEW

Edwin Williams: Representation Theory. MIT Press, Cambridge MA, 2003, 285 pp.

Representation Theory is a concise and provocative book.¹ The range of phenomena that are addressed and of the issues covered is vast. Because of the wide coverage, no review can do justice if it is much shorter than the book itself. Having to observe the reasonable limits, I will restrict myself to illustrating and discussing the most significant points of the theory. In addition, I will point out some implications and problems that may follow from the suggestions. *Representation Theory* is a programmatic book (a program in the sense that the minimalist program is), so loose ends are expected, and often pointed out by the author.

1. Basic tenets of Representation Theory

Following the organization of the book, first I sketch the basics of Representation Theory. Then section 2 follows Williams (his chapters 2–8) in discussing how various components of the grammar are treated in this approach.

In chapter 1, *Economy as shape conservation*, Williams lays down the guidelines of Representation Theory (RT). The various levels, which encode different structures, form a crucial part of the theory. The labels of individual levels are largely self-explanatory: for instance, TS encodes thematic relations; CS the case-marking of nominals and case-marking/case-checking relations; and PS is the level at which control is defined.

- (1) Theta Structure (TS)
 ↓
 Case Structure (CS)
 ↓
 Predication Structure (PS)²
 ↓
 Surface Structure (SS) ↔ Quantification Structure (QS)
 ↓
 Focus Structure (FS)
 ↓
 Accent Structure (AS)

¹ I would like to acknowledge the following people for interesting and helpful discussion: M. Gracanin, I. Heim, A. Nevins, N. Richards, and S. Takahashi. Preparation of this review was partially supported by the OTKA grant TS 40 705.

² Predicate Structure is only introduced in chapter 3, but is included here for completeness.

Levels are temporally ordered as in (1), from top down; TS precedes CS, which in turn precedes PS, and so on. The arrows represent a mapping relation that holds between adjacent levels: the arrow points from the **mapping** level to the **mapped** one.³ Mapping usually yields homomorphic levels (preserving linear ordering and hierarchical relations), but mismapping can also arise (in (2) and (3), respectively; the exclamation mark next to the arrow indicates a mismapping).⁴

(2)	(a)	Fred	believes	the lie	
	(b) TS	agent	V _{pred}	theme	[homomorphic mapping]
		‡	‡	‡	
	(c) CS	NP _{nom}	V _{case assigner}	NP _{acc}	
(3)	(a)	Fred	believes	Frank	to lie
	(b) TS	agent	V _{pred}	agent	V _{pred} [mismapping]
		‡	‡	‡!	
	(c) CS	NP _{nom}	V _{case assigner}	NP _{acc}	

The homomorphic mapping in (2) maps the agent to a nominative NP and the object to an accusative NP. In (3), the familiar ECM construction, the matrix agent *Fred* is mapped to a nominative NP, as before. The embedded agent, however, is mapped to an accusative rather than a nominative NP; an instance of mismapping.

Mapping, as the terminology suggests, is preferred to mismapping. Mismapping, a non-homomorphic match to a structure at level L_i , is possible only if homomorphic matches at level L_{i+1} are missing. In (3) no homomorphic match is available for TS at CS, since nominative case is not licensed by nonfinite T in English. The availability of mismappings can be seen as an application of Panini's principle (p. 7): "use the most specific applicable form." The most specific form, derived by homomorphic mapping, is not available in (3); thus it must do with the mismatched representation at CS.

If no mismapping is enforced, then representations at the earlier levels are (homomorphically) mapped to later levels. This yields the (violable) principle of **Shape Conservation**: whenever possible, operations conspire to preserve hierarchical and linear order. Thus within RT shape conservation follows from the preference for homomorphic mapping.

To summarize: the basic ingredients of RT, presented in chapter 1, are (a) the existence and organization of levels, which encode different structures; (b) mapping

³ Williams uses a wavy arrow to represent the mapping relation. The direction of mapping is relevant only if mapping is understood as some kind of derivation, as also indicated by the terminology of **later** and **earlier** levels.

⁴ The author describes mapping as **isomorphic** rather than homomorphic. He allows, however, the introduction of new elements in levels other than TS, the earliest level. Thus mapping is homomorphic, preserving relations between elements of the lower level at the higher one. The inverse of mapping is not homomorphic, so mapping itself cannot be described as isomorphic (as Williams himself notes on p. 61).

(or mismapping), which relates structures at adjacent levels, and (c) blocking, where more specific [= homomorphic] mappings block non-homomorphic ones, resulting in shape conservation whenever possible.

Shape conservation also characterizes theories other than RT. Consider, for instance, Fox–Pesetsky (to appear). They assume a minimalist structure of grammar, along with restrictions on the linearization of terminals. Terminal elements of a syntactic structure are linearized at the end of a phase. Once order among two elements is established, it cannot be revised, but must be respected throughout the derivation. In this way, Fox and Pesetsky assure shape conservation within a minimalist setting. Shape conservation can also be introduced explicitly. This is the track taken by, for instance, Mueller (2000), who introduces **Shape Conservation** as a (relativized) constraint in an OT system.

2. Elaboration and application of RT

In later chapters, Williams elaborates and applies the theoretical skeleton of RT to a variety of phenomena. In chapter 2, he discusses topicalization, scope, and focus phenomena, and points out a source of crosslinguistic variation in RT. Chapter 3 introduces the **Level Embedding Conjecture** (LEC), which allows variation across elements according to the level where they are embedded. Chapters 4–6 apply a LEC-inspired analysis to a range of phenomena: anaphora, reconstruction effects, and movement (versus mismapping). Chapters 7 and 8 provide an outline of phrase structure, inflection, and head movement phenomena within RT. In the remainder of this section I will briefly note the import of these chapters.

2.1. Quantifiers, focus, and crosslinguistic variation

Chapter 2 elaborates on SS, QS and FS, the levels that encode the surface structure, quantifier scope relations and focus, respectively. Recall from (1) that SS is adjacent to CS, FS and QS, as shown below.

- (4)
- | | |
|------------------------|--|
| Case Structure (CS) | |
| ⋈ | |
| Surface Structure (SS) | \rightsquigarrow Quantification Structure (QS) |
| ⋈ | |
| Focus Structure (FS) | |

Either one of the three mapping relations above can give rise to mismapping. Williams suggests that Heavy NP shift (HNPS) is an instance of mismapping between SS and CS. The mismatch is tolerated because the FS \rightsquigarrow SS mapping is canonical. Consider the data in (5).

- (5)
- (a) John gave to Mary [all of the money in the SATCHEL]
 - (b) *John gave to MARY [all the money in the satchel]
 - (c) John gave [all the money in the SATCHEL] to Mary
 - (d) John gave [all the money in the satchel] to MARY

HNPS is possible if the shifted NP contains focus (or if the NP itself is focused), as in (5a). If focus falls outside of the NP, the result is ungrammatical (5b). Focusing

the object is also possible without HNPS (5c). The data in (5) follow if (a) English nuclear stress falls on the right edge of the clause, and (b) HNPS is optional. The generalization is the following: HNPS, if it applies, moves the focus to the end of the clause, to the default nuclear stress position. Thus HNPS yields a canonical FS \rightsquigarrow SS mapping, with default nuclear stress positioning. (5c) shows an alternative without HNPS, where mismapping occurs between FS and SS.

A partial RT derivation of (5a) is given in (6). HNPS results in a SS \rightsquigarrow ! CS mismapping, but a canonical FS \rightsquigarrow SS mapping. If HNPS applies and focus falls on the indirect object, as in (5b), then mismapping occurs both in SS \rightsquigarrow ! CS, and FS \rightsquigarrow ! SS. This double mismatch is not tolerated because the structure has an alternative with no mismappings at all, namely (5d).

- (6) Case Structure (CS)
 \uparrow !
 Surface Structure (SS) \rightsquigarrow Quantification Structure (QS)
 \uparrow
 Focus Structure (FS)
- (7) *Case Structure (CS)
 \uparrow !
 Surface Structure (SS) \rightsquigarrow Quantification Structure (QS)
 \uparrow !
 Focus Structure (FS)

The paradigm in (5) shows that mismapping is tolerated if there is no alternative without mismappings. HNPS is optional; mismapping between both SS \rightsquigarrow ! CS or FS \rightsquigarrow ! SS leads to an ungrammatical result. However, not all variation in mismapping is available in a given language: quantifier positions are a case in point. Williams argues that languages vary in preferring homomorphic mapping between certain levels. English and German differ in this respect: English prefers a homomorphic SS \rightsquigarrow CS mapping, and German, a SS \rightsquigarrow QS mapping. The difference that arises from these preferences can be observed with two quantifiers, as in (8).

- (8) (a) dass eine Sopranistin jedes Schubertlied gesungen hat
 that a soprano every Schubert song sung has
 'that a soprano sang every song by Schubert' [a > every, *every > a]
- (b) dass jedes Schubertlied eine Sopranistin gesungen hat
 that every Schubert song a soprano sung has
 'that a soprano sang every song by Schubert' [*a > every, every > a]
- (c) a soprano sang every song by Schubert
 [a > every, every > a]
- ((8a,b) from Diesing 1992; (8c) from Williams)

German surface order mirrors quantifier scope (8a,b), while the unique English order is ambiguous (8c). At the same time, English surface structure shows a canonical case configuration, and German (8b) does not. The difference between the two languages is captured by the assumption that English enforces canonical homomorphic

SS \rightsquigarrow CS mapping, at the cost of mismapping to QS, while German does the reverse. (9) indicates the mismapping that arises with the inverse reading in (8c) and (8b).

(9)	(a)	English [every > a (8c)]	(b)	German [every > a (8b)]
		Case Structure (CS)		Case Structure (CS)
		}		}!
		Surface Structure (SS)		Surface Structure (SS)
		}!		}
		Quantification Structure (QS)		Quantification Structure (QS)

In sum, Williams argues that focus and quantifier movement (and scrambling in general) arise from mismappings, and not from familiar movement operations. In addition, he identifies various instances of mismappings: (a) due to restrictions on a given level (ECM, section 2); (b) due to a mismapping between any of two pairs of levels (HNPS); and (c) due to preference for canonical mappings between two levels (quantifier movement in German).

2.2. Embedding and variation in embedding levels

The third chapter deals with embedding. Williams defines the **Level Embedding Conjecture** (LEC), which states that an item can be embedded only at the level where it is defined. Functional elements and adjuncts, which do not have to be theta-marked, can be introduced at later levels. For instance, complementizers and complementizer structure are introduced at SS. Thus any embedding that involves complementizers can take place, by the LEC, only at SS.

Williams presents a typology of embedded clauses, where the properties of predicates vary according to the level where they are inserted. Clauses that are to be embedded are constructed in parallel with the matrix clause. If the to-be-embedded clause is an argument, then Williams assumes that a dummy “shadow” element is merged in its position at TS. The to-be-embedded clause can be inserted at various levels, depending on its functional category. A predicate inserted at TS is a theta-role assigner. The resulting **serial verb** construction shows strong clause union effects and has a complex theta structure. Embedding at CS establishes a looser connection: only the case marking abilities of the predicates interact, and yield ECM structures. As noted above, complementizer structure is inserted at SS. Thus the predicate embedded at SS is a CP. Embedding at FS, the level following SS, is still larger, and disallows extraction from the embedded predicate. In general, a predicate embedded at level L shows union with the embedding predicate with respect to properties that are defined at L. The embedding typology is summarized in (10).

- (10) (a) TS: serial verb constructions
 (b) CS: ECM constructions
 (c) SS: transparent *that*-clauses
 (d) FS: non-bridge embedding

This layered view of embedding can be extended to ban improper movement in general.⁵ The traditional formulation of the ban prohibits moving an element from an A'-position to an A-position, and so rules out (11).

- (11) *[_{IP} John₁ seems [_{CP} t₁' [_{IP} t₁ knows every Schubert song]]]

In RT, the ban is more general, as it prohibits all movement licensed at level L_i if it follows movement that happens at level L_{i+n} . The ban follows if not only embedding and mismapping, but also movement must take place at the level where the moved element (or the target) is defined.⁶ Consider the familiar A- and A'-movement, assuming that these are real instances of movement. It was noted above that complementizer structure is inserted at SS; let us assume, following Williams, that finite inflection is inserted at the earlier PS level. Given the ties between the insertion of functional elements and the movement they trigger, A-movement (at PS) will precede all instances of A'-movement (at SS).

2.3. Anaphora

If anaphors can be introduced at different levels, then—just like predicate embedding—they are predicted to show different properties, in accordance with the level at which they are introduced. Variation is predicted with respect to three properties: locality, reconstruction, and the nature of the antecedent.

As noted above, elements can be merged at levels later than TS. No deletion is possible, however; thus the size of the structure can grow from level to level. If the anaphor has to be bound at the level where it is introduced, then the search space will be larger in later levels than earlier ones. The locality difference follows: if anaphor A_1 is bound in a domain larger than anaphor A_2 , then A_1 was merged at a later level than A_2 .

Williams discusses three levels where anaphors can be merged: TS, CS, and SS/FS. Anaphors merged at TS must choose coarguments as antecedents, as only these are available at the level. TS anaphors include the prefix *self-* in English and the Dutch *zichzelf* (12). CS anaphors may choose from a wider range of elements for an antecedent. Recall that ECM constructions are established at CS. An exceptionally case-marked CS anaphor (such as *himself* in (13a), and the Dutch *zich*) can thus also seek an antecedent in the matrix clause. Finally, anaphors such as Greek *o/thon idhio*, Korean *caki* or Japanese *zibun* are merged at SS/FS (14). These anaphors do not need to be bound even within the minimal finite clause, as (14) shows.

- (12) (a) the case **self**-destroyed
 (b) Max haat **zichzelf**
 M. hates himself
 'Max hates himself' (Koster 1985)

⁵ For the ban on improper movement to hold, it must also be assumed that movement is constrained by the extension condition, which requires movement to target the root of the tree.

⁶ Williams analyses passivization as mismapping between TS and CS. Possibly raising (not discussed in RT) is also derived as an instance of mismapping.

- (13) (a) John believes [**himself** to be safe]
 (b) Max hoorde mij over **zich** praten
 M. heard me about self talk
 'Max heard me talk about him' (Koster 1985)
- (14) o Yanis₁ ipe ston Costa₂[oti i Maria aghapa **ton idhio**_{1/2*3}]
 the Y. said to-the C. that the M. loves himself
 'Yanis told Costa that Maria loves him' (Iatridou 1986)

I believe that the typology of anaphors can be extended and assimilated to that of Buring (2004). Buring describes four kinds of anaphors, as in (15). The RT levels that can be equated with them are in square brackets.

- (15) (a) anaphors with the **coargument domain** as the binding domain [TS]
 (b) anaphors with the **subject domain** as the binding domain [CS]
 (c) anaphors with the **tense domain** as the binding domain [PS]
 (d) anaphors with the **root domain** as the binding domain [SS]

The anaphor type not present in Williams' typology is the one bound in tense domains. This anaphor (instantiated by the Marathi *swataah* (16), Danish *sig*, or Russian *sebja*) must be bound within a finite clause.⁷

- (16) Jane₁[John ne swataahlaa₁ maarlyaaavar] rusun
 J. J. erg self hitting angry
 'Jane remained angry upon John hitting (her)self'
 (Dalrymple 1993, cited by Buring 2004)

Recall that variation among the possible antecedents is also encoded in RT: only those elements can serve as antecedents that are present at the level where the anaphor is introduced. Reconstruction for binding also follows from the level-based account; binding relationships are established at the level where anaphors are introduced, but need not be reflected at the surface. Later mismappings or movement can obscure the binding relations.

The RT-based approach to anaphors makes interesting predictions with respect to the variety of anaphora and their properties. In addition, the proposed categories

⁷ In classifying anaphors, Buring (2004) differs from Williams in some respects. For instance, he characterizes the coargument domain as being only a negative domain for anaphors. He assumes that Dutch *zich* and Marathi *to* are excluded from the coargument domain. However, the distribution of these anaphors is different: while *to* cannot corefer with a coargument, *zich* can do so:

(i) Max₁ wast / schaamt zich₁
 M. washed shames self

Other anaphors that must be bound within a coargument domain may include *self*- and the Chi-mwi:ni reflexive *ru:hu-* (Marantz 1984, citing Abasheikh 1979).

seem to be in line with the typology of anaphors, as in Buring (2004). As expected in a programmatic theory, some questions still remain. For instance, if theta role assignment is confined to TS, then how is it possible for anaphors introduced at later levels to be assigned thematic roles? Possibly, the theory has to make recourse to “dummy” filler elements at TS,⁸ which are replaced by the anaphors at a later level—but this way the theory loses some of its appeal. Alternatively, anaphors can be seen as operators affecting the argument structure of the predicate, similarly to Reinhart-Reuland (1983). These operators can be treated as adjuncts, free to be merged at a later level.

2.4. A/A'/A''/A'''

Given the preceding discussion, it may not come as a surprise that movement can also be seen as a level phenomenon in RT, with properties depending on the level where it applies (the notation in the section title refers to this *n*-ary distinction). As in the case of anaphors, locality, target and reconstruction properties correlate, depending on the level where the movement applies.

Williams assumes traditional movement as well as mismappings between adjacent levels. *Wh*-movement is an instance of genuine movement in RT, targeting Spec,CP. Since movement applies at the earliest level possible, *wh*-movement happens at SS, where complementizer structure is introduced. *Wh*-movement is interpreted as reconstructed for processes that take place at earlier levels—for instance, binding, since (anaphor) binding applies at CS:

- (17) *who*₁ will John₂ want [*t*₁ to invite him*_{1/2}/himself_{1/*2}]?

Movement and mismapping behave similarly with respect to the “level effects” of locality, target and reconstruction. After detailed discussion of reconstruction effects, Williams presents a table that summarizes movement and mismapping operations and the relations that they reconstruct for.

However, the level-based view of *wh*-movement fails to account for the existence of intermediate landing sites between the extraction position and Spec,CP. As Fox (2000) shows, binding facts indicate that a *wh*-phrase must be able to reconstruct to an intermediate site below Spec,CP. In (18), the *wh*-phrase must reconstruct to a position below the subject to ensure variable binding of *he*. If the phrase reconstructs to below *her*, then a condition C violation arises. Since the sentence is judged grammatical, there must be an available reconstruction site ([_]) which allows variable binding without the condition C violation.

- (18) [which of the papers that *he*₁ wrote for Ms Brown₂] did every student₁ [_] get her₂ [*] to grade?⁹

(Fox 2000)

⁸ Suggested by Williams in a later chapter (p. 183), where he uses the term “shadow” for filler elements.

⁹ If the quantifier bound the variable from a QR-ed position, then a WCO violation would arise.

Recall from section 2.2. that the generalized ban on improper movement crucially depends on assuming extension; namely, that movement targets only the root of the tree. By assumption, *wh*-movement can only happen at SS, where the CP structure is introduced. A to-be-embedded clause is built in parallel with the matrix clause, and embedded at SS. By the extension condition, a *wh*-phrase inside the embedded clause can then only target matrix Spec,CP. Thus the availability of intermediate landing sites is incompatible with the RT view of *wh*-movement.

2.5. Superiority and movement

As noted in the previous section, Williams strictly distinguishes movement from mismatching (e.g., scrambling). They are distinguished by the dependencies that they establish within a single level: mismatching yields intersecting dependencies (deriving Scandinavian object shift), while (*wh*-)movement results in nested dependencies.

Williams goes further than merely distinguishing movement from mismatching. He also suggests that not all instances of “*wh*-movement” are real instances of movement, only movement of the structurally highest element. In his account, mismatching accounts for the movement of lower *wh*-phrases as well as scrambling, passivization, and HNPS. In assigning such a wide empirical coverage to mismatching, Williams reduces almost all instances of (phrasal) movement to mismatching—with the recalcitrant exception of movement of the highest *wh*-phrase.

A different approach that makes it possible to unify movement phenomena was presented by Richards (1997; 2001). Richards defines superiority in a way that enforces this locality restriction on the highest element only, which moves first. Once this element has paid the “subjacency tax”, the others are free to violate subjacency, and can move in any order. The variable ordering of overtly moved *wh*-phrases in Bulgarian, which conforms to the subjacency tax account, is shown below.

- (19) (a) *koj kogo kakvo e pital?*
 who whom what aux asked
 ‘who asked what from whom?’
 (b) *koj kakvo kogo e pital?* (Bošković 1995, cited in Richards 1997)

According to Williams, only the highest *wh*-phrase is moved by standard *wh*-movement. Other *wh*-phrases are displaced by scrambling, an instance of mismatch in RT. D-linking plays a role in scrambling, and it also determines the placement of *wh*-phrases. In Serbo-Croatian, D-linked *wh*-expressions do not need to move, while non-D-linked *wh*-phrases obligatorily move.

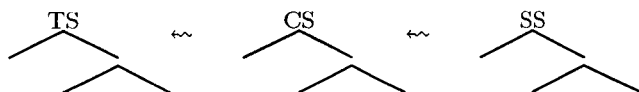
- (20) (a) *ko šta kupuje?* [non-D-linked *šta*]
 who what bought
 ‘who bought what?’
 (b) **ko kupuje šta?* [non-D-linked *šta*]
 (c) *ko je kupio koju knjigu?* [D-linked *koju knjigu*]
 who aux.3sg bought.prt which book
 ‘who bought which book?’ (Richards 1997)

For the reader, the proliferation of mismatching-based displacement phenomena may well raise the question of whether genuine movement is reduced to movement of the highest *wh*-phrase.¹⁰ Let us assume that it proves to be correct that *wh*-movement is exceptional in this regard and cannot be reduced to mismatching. In this case, it is interesting to know what property of *wh*-movement forces it to instantiate a displacement type of its own. The claim that “secondary” *wh*-movement is scrambling is not without problems: it is not clear, for instance, whether D-linking affects scrambling and “secondary” *wh*-movement in the same way. Whether focusing plays a role in forcing or allowing secondary *wh*-movement is also far from clear.

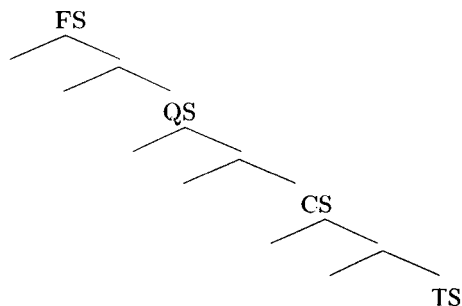
2.6. Phrase structure

Chapters 7 and 8 sketch an RT model of phrase structure. In addition, Williams outlines an account of inflection and head movement. Phrase structure within RT differs from the familiar generative phrase structure. RT trees represent structures at different levels; they are series of ‘partial’ trees that are related by mapping:

(23) RT PHRASE STRUCTURE



(24) STANDARD CLAUSE STRUCTURE



To represent the **complement-of** relation, Williams introduces the notation $x > y$, where x takes y as its complement. Phrase structure is restricted by two axioms: one defining possible juncture types, and the other determining a universal hierarchy of functional elements (based on Cinque 1998). Possible junctures are embedding, satisfaction (of features via agreement) and adjunction (p. 181). The universal hierarchy of functional heads can, incidentally, vary between $T > \text{AgrS} > \text{AgrO} > \text{Asp} > V$ and $\text{AgrS} > T >$

¹⁰ See the next section for a discussion of head movement within RT, which is also done without movement operations in the Government and Binding/Minimalist sense.

AgrO > Asp > V. Unlike standard phrase structures, not all heads need project in RT. A functional head may either appear as a free-standing lexical item (inserted in the respective head position) or as a feature (realized as an affix on a lower lexical head, without projection of the head). In this respect, functional structure is minimal, projected only when necessary. The functional hierarchy, assumed to be universally given, ensures that the mirror principle is observed (pending exceptions, to be discussed below). The mirror principle follows from the organization of RT if one functional element is introduced at each level (since levels are inherently ordered), and if the extension condition is observed.¹¹ Given level ordering, a suffix introduced at level L_i will always precede a suffix introduced at level L_{i+n} . Similarly, if the functional heads are freestanding, then the head introduced at L_i will follow the head introduced at L_{i+n} (25).

$$(25) [_{L(i+n)} \text{aux}_1 [_{L(i)} \text{aux}_2 [\dots]]]$$

Even though the mirror principle is largely valid, it is not always observed. In order to account for the ordering violations, Williams introduces an operation that yields fusion. Fusion arises when the **rule of combination** applies.

(26) RULE OF COMBINATION

$$X_Y + Y_Z \rightarrow [X + Y]_Z$$

In Southern Tiwa, the adjacent AgrS and AgrO morphemes are fused. Fusion and some reordering (resulting from **flip**, cf. below) yield (27).

$$(27) \text{ka} \quad \text{'u'u} \text{ -wia -ban} \\ \text{AgrS.AgrO baby give past} \\ [[\text{AgrS} + \text{AgrO}] > \text{V}] > \text{T}$$

In addition, Williams introduces the language CAT. CAT operates on right-branching syntactic structures, and has two operations that can alter the organization of elements. These operations are **flip** and **reassociate**, defined in (28).

(28) (a) FLIP

$$\text{If } X = [A > B], \text{ A and B terminal or nonterminal, Flip}(x) = [B < A]$$

(b) REASSOCIATE

$$\text{If } X = [A > [B > C]], \text{ R}(X) = [[A > B] > C]$$

Flip reverses the ordering of two elements in head-complement relation, and **reassociate**—as the name suggests—regroups elements. Note that both **flip** and **reassociate** are defined for right-branching structures; thus, for instance, **flip** bleeds further applications both **flip** and **reassociate**. Some limitations on displacement follow from the definitions of **flip** and **reassociate**:

¹¹ Recall from section 2.2. that the extension condition is also necessary to derive the ban on improper movement.

- (29) (a) no further movement of the moved constituent
 (b) no movement out of a moved constituent
 (c) no movement out of extracted-from constituents

Flip and **reassociate** play a role in inflectional systems, deriving the effects of head movement. In Inuit, the order of inflectional elements does not conform to the mirror principle:

- (30) (a) Piita-p mattak nini-va-a- \emptyset
 P-erg mattak-abs atc-indicative-3sg.subj-3sg.obj
 (b) $[V < [T > \text{AgrS} > \text{AgrO}]]^{12}$

The surface order arises with two applications of **reassociate**, and one of **flip**. Williams argues that Germanic verb (projection) raising and Hungarian restructuring contexts can also be modeled successfully with CAT. Ignoring verb modifiers (particles and other elements with particle-like distribution), the main patterns of Hungarian restructuring verbs are as in (31) (Brody 1997, Koopman-Szabolcsi 2000, and others).

- (31) (a) (nem) fogok₁ akarni₂ kezdeni₃ énekelni₄
 not will-1sg want-inf begin-inf sing-inf
 'I will not want to begin to sing' [straight/English order]
 (b) (nem) fogok₁ énekelni₄ kezdeni₃ akarni₂
 not will-1sg sing-inf begin-inf want-inf
 'I will not want to begin to sing' [compound/inverted/roll-up order]

Assuming that the right-branching (31a) is the basic order, **flip** can easily derive (31b). However, if **flip** were free to apply, then certain differences between (31a,b) would remain unaccounted for. For instance, a constituent can intervene between any of the verbs in (31a), but cannot appear within the sequence [énekelni₄ kezdeni₃ akarni₂] in (31b). To account for this difference, Williams suggests specifying two distinct subcategorization frames for restructuring verbs. The head is either a root, requiring the complement (root) to appear to the left of the head (32a), or it is a word, and requires a phrasal complement on its right (32b).

- (32) (a) root, F_{root} —
 (b) word, — F_n

The size of the complement is overtly encoded in (32), which yields the effects described above. In addition, it is also predicted that the roll-up structure can only begin with the final (lexical) verb; a word cannot occur inside a complex, compound root. It must also be assumed that tensed auxiliaries have only the subcategorization frame in (32b), to avoid their participation in a rollup structure. Since (32a,b) differ in the level of the head and complement, the alternative orders are not generated by **flip** or **reassociate**,

¹² Ignoring Asp in the functional hierarchy.

but are encoded as ambiguity in subcategorization frames. Williams argues that while a lexically encoded ambiguity that mimics **flip** and **reassociate** can model verb order, it cannot derive the behavior of verbal modifiers, and that verbal modifiers are displaced by movement rather than by the **flip/reassociate**-type operations. This analysis derives the fact that verbal modifier movement is incompatible with the compound structure (33a) and possible from within a finite CP domain (33b).

- (33) (a) *be₁ fogok akarni [menn₂ kezdeni t₁ t₂]
 in will-1sg want-inf go-inf begin-inf
 'I will want to begin to go in'
 (b) be₁ kell, [CP hogy t₁ menjek]
 in must that go-subj-1sg
 'I must go in'

Although Williams' account derives the desired results, it is not immediately clear why (restricted) **flip** and **reassociate** could not derive the facts in (33). In addition, it is not **flip** and **reassociate**, but a lexically encoded ambiguity in the subcategorization frames that yields the different restructuring environments. Thus even if one wishes to maintain Williams' account that verbal modifiers and restructuring predicates are displaced by different means, **flip/reassociate** can be used to account for verbal modifier movement. Finally, let us briefly consider the status of **flip** and **reassociate**. For English restructuring contexts, we have seen that the alternation must be lexically encoded. In inflectional systems, **flip** and **reassociate** are also not free to apply, but are encoded within the entry for the functional element. For German verb (projection) raising, **flip** and **reassociate** must be independently specified for modals and auxiliaries, since they apply differently. Thus it appears that some aspect of **flip/reassociate** must always be specified in the lexicon, making these operations rather unlike mismapping.

3. Semantics in RT

The final chapter of the book discusses some aspects of semantics in RT. One respect in which semantics in RT departs from a standard view of semantics is compositionality. An utterance is not represented in a single structure, but at various levels that are connected by (mis)mapping. Thus there is no unique structure that could be interpreted incrementally. Instead, Williams suggests that translation is determined by matching rather than by a compositional process. A matching semantics requires the definition of what elements are matched; Williams illustrates matching translation by language or sentence matching. It is not clear, however, how the meaning of individual sentences is derived by matching.

The interpretations of individual levels may be matched among each other, but they express very different aspects of meaning (thematic or quantificational structure, for instance).¹³ A similar, matching-like view may be to determine some pre-established properties of meaning independently, as in a checklist (I. Heim, p.c.). It

¹³ A similar approach to semantics, where different levels contribute different kinds of meanings, was also advocated in Jackendoff (1972) and in the Extended Standard Theory approach, among others.

should be noted that this approach differs significantly from compositional approaches, which determine truth conditions as the meaning of a proposition.¹⁴

In order to account for the tendency of meanings to diverge, Williams introduces the notion of **semantic blocking**. Languages tend to disfavor different forms to express the same meaning, which Williams describes as "nature hates a synonymy" (p. 246). The dispreference can be observed among lexical items, where synonyms differ in meaning or stylistic value. Similarly, if there are two distinct forms of a sentence, then they will be assigned different meanings. Recall, for example, that different quantifier orders in German are associated with distinct scope readings (8a,b). Williams presents this semantic blocking of synonymy as a universal property. In order to evaluate the proposal, it is necessary to establish what the comparison set for blocking is. For instance, the same meaning can be assigned to either (5a) or (5c), repeated below (F marks the focused constituent).

- (34) (a) John gave to Mary [all of the money in the [SATCHEL]_F] (= (5a))
 (b) John gave [all the money in the [SATCHEL]_F] to Mary (= (5c))

Narrow focus on *satchel* is possible in either example, in violation of the synonymy blocking hypothesis. However, if blocking is interpreted as comparing all the meanings assigned to two forms, then (34a) and (34b) will not violate the hypothesis. (36) shows that focus projection is possible in (34a), but not in (34b).

(35) What did John do?

- (a) John [gave to Mary all of the money in the SATCHEL]_F
 (b) *John [gave all the money in the SATCHEL to Mary]_F

It appears then that the comparison set for semantic blocking must take into account (at least) the lexical elements in the string and the meanings assigned to the string. In order to evaluate the blocking hypothesis fully, a more explicit formulation of the comparison set is needed.

In the final chapter Williams also includes a detailed discussion of foci. He distinguishes two types of foci: **L(ogical) focus** and **I(nformation) focus**. His terms correspond to contrastive/identificational and information focus, respectively (cf. É. Kiss 1998, among others). The realization of the two focus types can differ. In English, for instance, L-focus is canonically realized as cleft or pseudocleft, and I-focus receives main stress. In Hungarian, (a single) L-focus obligatorily appears in the immediately preverbal position, while I-focus has a much freer distribution. Williams notes that L-focus is subordinate to I-focus in the sense that in (corrective) contexts L-focus can be embedded within the I-presupposition (outside of the I-focus) (36), while the reverse is not possible (37).

- (36) (a) It was JOHN that Bill saw
 (b) No, it was John that Bill HEARD [corrective I-focus]

¹⁴ A matching approach may prove problematic for variable binding. If binding is determined at a single level (as suggested by Williams for German, where it applies at PS), then quantifiers cannot interact with (variable) binding.

- (37) (a) JOHN saw Bill
 (b) *No, it was Sam that JOHN saw [corrective L-focus]

The asymmetry between the two foci is due to the different levels where they are located: I-focus is defined at AS, while L-focus is determined at SS (the fact that I-focus is used as corrective focus is presumably due to the fact that it is established later than L-focus).

With respect to Hungarian focus, Williams notes that it differs from English in two respects: (a) focus movement to the left (to the immediately preverbal position), and (b) initial rather than final nuclear stress. In English focus movement can target the right edge (as with HNPS), and the nuclear accent is final. Williams notes that the two parameters are predicted to be independent, since they are defined at distinct levels. Accent (stress) placement is determined at AS, and the positioning of focus is determined at FS. He notes that there is no plausible connection between the values of these parameters, and remarks that "I hope the two parameters do not turn out to be linked empirically." Such a connection is, I believe, not implausible. In fact, Arregi (2002) and Szendrői (2003) argue in detail for connecting focus position and nuclear stress position in Basque and Hungarian, respectively.¹⁵ In these approaches, the driving force behind focus movement is movement to the default nuclear stress position. All in all, I think that it is far from clear that an inherent link between focus displacement and nuclear stress is undesirable.

4. Summary

The organization of RT builds on the separation of deep and surface structure, several times multiplied. The proliferation of levels is useful because it provides a typology that can describe and predict the varied behavior of a number of phenomena (e.g., movement, anaphora, embeddings). At the same time, the novel organization of grammar presents a fresh point of view of old phenomena. The analyses sketched in RT and those inspired by it—even if implemented in more established frameworks—should prove to be interesting to syntacticians as well as to a wider audience.

Anikó Csirmaz

References

- Abasheikh, Mohammad Imam 1979. The grammar of Chimwiini causatives. Doctoral dissertation, University of Illinois.
- Arregi, Carlos 2002. Movement, focus and scope in Basque. Paper presented at the Syntax-discourse interface workshop (GLOW 25), Utrecht.
- Bošković, Željko 1995. On certain violations of the superiority condition, AgrO, and economy of derivation. Ms., University of Connecticut.
- Bošković, Željko 1998. Multiple wh-fronting and the economy of derivation. In: Emily Curtis – James Lyle – Gabriel Webster (eds): *Proceedings of the Sixteenth West Coast Conference on Formal Linguistics*, 49–63. CSLI, Stanford.

¹⁵ Arregi (2002) assumes a hierarchical (Cinque 1993) rather than an edge-based account of nuclear stress.

- Brody, Michael 1997. Mirror theory. Ms., University College London.
- Büiring, Daniel 2004. Binding Theory. Cambridge University Press, Cambridge.
- Cinque, Guglielmo 1993. A null theory of phrase and compound stress. In: *Linguistic Inquiry* 24: 239–97.
- Cinque, Guglielmo 1998. Adverbs and Functional Heads. Oxford University Press, Oxford.
- Dalrymple, Mary 1993. The Syntax of Anaphoric Binding. CSLI, Stanford.
- Diesing, Molly 1992. Indefinites. MIT Press, Cambridge MA.
- É. Kiss, Katalin 1998. Identificational focus versus information focus. In: *Language* 74: 245–73.
- Fox, Danny 2000. Economy and Semantic Interpretation. MIT Press, Cambridge MA.
- Fox, Danny – David Pesetsky to appear. Cyclic linearization of syntactic structure. In: *Theoretical Linguistics*.
- Iatridou, Sabine 1986. An anaphor not bound in its governing category. In: *Linguistic Inquiry* 17: 766–72.
- Jackendoff, Ray 1972. Semantic Interpretation in Generative Grammar. MIT Press, Cambridge MA.
- Konopasky, Abigail 2002. A syntacto-morphological analysis of dependent heads in Slavic. Doctoral dissertation, Princeton University.
- Koopman, Hilda – Anna Szabolcsi 2000. Verbal Complexes. MIT Press, Cambridge MA.
- Koster, Jan 1985. Reflexives in Dutch. In: Jacqueline Guéron – Hans-Georg Obenauer – Jean-Yves Pollock (eds): *Grammatical Representations*, 141–67. Foris, Dordrecht.
- Marantz, Alec 1984. On the Nature of Grammatical Relations. MIT Press, Cambridge MA.
- Mueller, Gereon 2000. Shape conservation and remnant movement. In: Masako Hirotsu – Andries Coetzee – Nancy Hall – Ji-Yung Kim (eds): *NELS 30. Proceedings of the North East Linguistic Society*, 525–39. GLSA, Amherst.
- Reinhart, Tanya – Eric Reuland 1993. Reflexivity. In: *Linguistic Inquiry* 24: 657–720.
- Richards, Norvin 1997. What moves where in which language? Doctoral dissertation, MIT.
- Richards, Norvin 2001. Movement in Language. Interaction and Architectures. Cambridge University Press, Cambridge.
- Szendrói, Krisztina 2003. A stress-based approach to the syntax of Hungarian focus. In: *The Linguistic Review* 20: 37–78.

HUNGARIAN BOOKS ON LINGUISTICS

Sándor Szilágyi N.: *Elmélet és módszer a nyelvészethen — különös tekintettel a fonológiára* [Theory and method in linguistics, with special regard to phonology]. Erdélyi Tudományos Füzetek 245. Erdélyi Múzeum-Egyesület, Kolozsvár, 2004. 240 pp.

Scientific research has phases in which the best way to proceed is to go back to the basics and, partly in view of experience accumulated in the meantime, to submit one's fundamental axioms, the specific claims based on them, and even the set of terms one uses, to thorough reconsideration. Usually, these axioms and claims were once formulated within the scientific paradigm of a given period when practically everybody thought they were good, natural, and evident, an evaluation (or, less tactfully put, a belief) that has come to accompany them to such an extent that later scholars, even though their general perspective may have changed, did not take it to be necessary to critically reassess them, except when a multitude of uninterpretable facts forced them to do so. On the other hand, certain principles or terms that used to be effective tools, not only of the clarification of research objectives and methods but also of the interpretation of the data investigated, may lose their former significance as time goes by — not because someone has disproved them or has shown them to be untenable but rather because of changes in the general climate of research or simply for sheer convenience.

This book goes back to the very basics indeed. In the Introduction, the author discusses issues that pertain to general problems with scientific terms and theoretical categories, and partly to the philosophy of knowledge; a linguistic perspective is, however, present throughout, not only in the ultimate aim of the enterprise but also as a general methodological backdrop against which the individual problems are analysed. Part One deals with linguistic theory in general. The author develops a theoretical framework in which he intends to go on to situate his theory of phonology. Part Two, then, not only applies that framework to phonology, but rather it describes how one is to write phonology in view of all that was concluded and laid down beforehand: what steps the method involves, what terms there are to introduce, how those terms are to be understood, and how a synchronic phonology of 'speech products' (as opposed to a phonology of 'speech production') is to be constructed.

In phonology, the author claims, one has to investigate the constraints and conditions on language-specific 'order' within speech products at the level whose basic units are sounds (that are not linearly subdivisible into smaller sound units). One has to consider everything except pieces of information whose interpretation requires the study of units of speech products that are larger than sounds, with their specific characteristics that are not directly related to those of sounds. The basic units are to be looked at in themselves, extracted from the whole of speech products, as well as in terms of how their occurrence within the linear order of speech products is constrained. Everything has to be taken into consideration that can be observed at this level and be interpreted without directly relying on data having to do with what the hearer comes to know or understand on hearing the given sequence. Accordingly, the

author excludes the investigation of things like sentence intonation and sentence stress from the subject-matter of phonology.

Since phonology is taken to embrace the whole of the area sketched in the previous paragraph, phonetics—or at least a certain kind of phonetics—is far from being excluded from phonology: indeed, it is taken to be its firm basis and point of departure. All phonological inquiry necessarily starts with phonetics and goes on with phonology in the strict sense. This is not quite the case in present-day phonology: a fact that is not without consequences. Today's (generative or generative-inspired) schools of phonology start from the sentence and go towards sounds; hence, phonetics comes at the very end, if at all. Whatever phonetics is traditionally concerned with is not taken to be closely related to what the linguist is to worry about. By contrast, the author argues that, in building a model of the speech product (a kind of representation of individual utterances) along with a model of the phonological system (a predictive model including the sound inventory with its paradigmatic system, as well as a generalised structural description of distributional constraints on speech products predicting the actual patterns that are found instead of expected patterns), phonology has to start with an investigation of sounds as directly observable discrete elements of the order of speech products.

Contents: Introduction: The trap of abstracta; Part One: Methodological principles, assumptions and conditions; The linguistics of speech production vs. the linguistics of speech products; The issues of synchrony vs. diachrony; Part Two: The method of the phonology of speech products; General constraints on the phonology of speech products; The subject-matter, method, and theory of phonology; The steps of building the phonological model; Sounds as observable units of speech products; Sound differences from the point of view of the order of speech products; The F-model of speech products; Constraints identifiable within the F-model; The most important consequences.

Mária Gósy: Fonetika, a beszéd tudománya [Phonetics: The science of speech]. Osiris Kiadó, Budapest, 2004. 350 pp.

This textbook introduces the reader to the science of speech. It primarily serves the pedagogical purposes of various branches of university- and college-level education but it also prepares students and other readers for further studies in speech science (like the special education of handicapped children, the relevant engineering areas, or speech technology). The book breaks with a number of outworn beliefs and proposes novel ideas on a number of issues. The chapters embrace all the areas that are necessary to study in order to get acquainted with the properties of speech. In terms of the interrelatedness and unity of articulation, acoustics and perception, they cover the biological foundations of speaking and hearing, the production and classification of speech sounds, sound combinations, and sound sequences, the prosodic properties of speech and peculiarities of spontaneous speech. The book discusses each topic in a general-phonetic framework. This means that it gives an overview of a given range of phenomena observed in the languages of the world, and then it describes the specifics of Hungarian in that respect. Results of basic research are subsequently made use of in applied phonetics and speech technology; these are discussed in separate chapters, followed by one on phonetic tools, instruments, and procedures. The book closes with an overview of the history of general phonetics and of the phonetics of Hungarian. Finally, a list of tasks still to be solved is given.

Contents: 1. The science of phonetics; 2. Biological foundations of speech; 3. Segmental structure; 4. The connection between articulation and acoustic patterns; 5. The acoustic structure of speech sounds; 6. Coarticulation; 7. The perception of segmental structure; 8. Suprasegmental structure; 9. The perception of suprasegmentals; 10. Peculiarities of spontaneous speech; 11. At the borderline between phonetics and phonology; 12. Applied phonetics; 13. The arsenal of phonetics; 14. An overview of the history of phonetics; 15. Outlook; References; Index.

The Even Yearbook 1-6 (1994-2004). Department of English Linguistics, School of English and American Studies, Eötvös Loránd University (ELTE), Budapest.

The publication of the 6th volume of *The Even Yearbook* marks an important anniversary. It was exactly 10 years ago, in 1994, that the first volume appeared. It was a collection of working papers by linguists who taught at the English Linguistics Department of the School of English and American Studies at Eötvös Loránd University, Budapest, and it was given the title *The Even Yearbook* because it was meant to be the first of a series of books coming out in every even-numbered year. Since 1994, *The Even Yearbook* has become a respectable series of collections of refereed papers, with new issues coming out in 1996, 1998, 2000, 2002 and 2004. Although primarily remaining a forum for teachers of the English Linguistics Department of ELTE, it has gradually also incorporated the writings of doctoral students who have joined the School's Doctoral Programme for English Linguistics.

Contents: Volume One (1994): When OT meets LLF: Multiple Wh-questions and Optimality Theory (Huba Bartos); Relational and nonrelational aspects of English stress (András Cser); Scandinavian influence in English? On the Basis of *Beowulf* and *Cursor Mundi* (Judit Farkas); The Old English *Rhyming Poem*: Dialect reconstruction and metrical type (Veronika Knieszsa); Adjective or noun? (Lajos Marosán); Partially-stressed syllables and "unstable" /t/ in English (Ádám Nádasdy); Negation, double negation and Optimality Theory (Mark Newson); Know thyself: Basic addressing patterns at the English Linguistics Department (Andrea Ágnes Reményi); The communication of grammatical proficiency (M. Trevor Shanklin); The vowel inventory of Hungarian: Its size and structure (Péter Siptár); Coronicity, velarity and why they are special (Péter Szigetvári); Coronal underspecification and the *CC_iVC_i constraint (Miklós Törkenczy); Rhythmic stress alternation in Hungarian (László Varga).

Volume Two (1996): The strengthening of voiced fricatives in Germanic (András Cser); Prepositions in the four versions of *Cursor Mundi* (How they support the MSS) (Judit Farkas); Breaking new ground. A review of *Cambridge International Dictionary of English*, CUP, 1995 (Péter A. Lázár); The Hidden Subject of the noun phrase (Mark Newson); A Janus-faced Hungarian consonant (Péter Siptár); Laryngeal contrasts and problematic representations (Péter Szigetvári); Hungarian intonation contours (László Varga).

Volume Three (1998): Phrasal verbs and VP shells (Péter Antonyi); What is nasal loss before fricatives? (András Cser); Some issues of segment length and syllable weight (Zoltán Benedek Gráf); A new psycholinguistic taxonomy of self-repairs in L2: A qualitative analysis with retrospection (Judit Kormos); Towards a taxonomy of "false friends": Faux amis for Hungarian users of English (Péter A. Lázár); Word classes and related issues (Lajos Marosán); Vowel length in present-day spoken Hungarian (Ádám Nádasdy - Péter Siptár); Pronominalisation, reflexivity and the

partial pronunciation of traces: Binding goes OT (Mark Newson); Voice assimilation in Hungarian: the hitches (Péter Szigetvári); Analysis of tonal sequences in English (Zsuzsa Tóth); The Intonational Phrase and Secondary Intonational Phrase Formation in Hungarian (László Varga); The stress patterns of *-ative* words (Nóra Wenszky).

Volume Four (2000): Phonological models of sonority (András Cser); Palatality Harmony in Proto-Slavonic (László Kristó); Meaning and word classes (Lajos Marosán); The war of the left periphery (Mark Newson); Degemination in Hungarian (Péter Siptár); Why CVCV (Péter Szigetvári); Approaches to Rhythmical Variation in English (László Varga); Halle's recent views on primary word stress (Nóra Wenszky).

Volume Five (2002): The beginning of the word revisited (Katalin Balogné Bérces); The semantics of idioms: a cognitive linguistic approach (Réka Benczes); An Old Norse–Old English contact phenomenon: the retention of the dative plural inflection *-um* in the Northumbrian dialect of Old English (Tamás Eitler); Objects and adverbials and the loss of OV order in English (Judit Górász); Complexity effects in nasal-continuant clusters (Zoltán Kiss); Conversion or alternate class membership? Comments on Brøndal's theory of proper noun (Lajos Marosán); The coordination particle (Mark Newson); Yod dropping in English and Croatian: some consonantal problems (Attila Starčević); Syncope in English (Péter Szigetvári).

Volume Six (2004): Connected speech phenomena in Strict CV phonology (Katalin Balogné Bérces); Analysing exocentric compounds in English: a case for creativity (Réka Benczes); On conditional *if*-sentences (Gergely Bottyán); Farewell to strict directionality: evidence from English (Csaba Csides); Late Middle English syntactic variation and change: towards an integrated model of accommodation in social networks (Tamás Eitler); Topic universality in OT inputs (Miklós Gáspár); Towards a typology of velar processes (Dániel Huber); Markedness, graduality and closedness in phonotactics—a phonetically grounded approach (Zoltán Kiss); Linguistic reconstruction: methods vs. interpretations (László Kristó); What is in a function (Lajos Marosán); Deforestation in syntax (Mark Newson); Absolute phonological ungrammaticality in Croatian (Attila Starčević); Head movement *qua* Root Merger (Balázs Surányi); To branch or not to branch? (Péter Szigetvári); Once more on the melodic segmentation of Hungarian utterances (László Varga).

These papers are downloadable in postscript and portable document format from <http://www.btk.elte.hu/delg/publications/even>.

The Odd Yearbook 1–7 (1993–2003). Department of English Linguistics, School of English and American Studies, Eötvös Loránd University (ELTE), Budapest.

The Odd Yearbook 7 (2003) is the seventh volume in a series of biennial yearbooks that contain papers in linguistics written by undergraduate students seeking a degree in English Language and Literature at the Eötvös Loránd University (ELTE), Budapest. The first volume came out in 1993, and so the latest volume also marks the 10th anniversary of the series. *The Odd Yearbook* publishes a selection of term papers written to linguistics seminars as well as the shortened versions of defended MA theses. There are many views on the interpretation of the title. Rumour has it that it was intended to be published every other year, starting from 1993. As a counterargument one may refer to the really odd volume that appeared in 1994. This has led some mischievous interpreters to propose reanalysing the title from *[odd year][book]* to *[odd] [yearbook]*. Yet others see it as an acronym formed from the Hungarian *okos diákok dolgozatai* 'clever students' papers'.

Contents: Volume One (1993): "Gorgeosity Made Flesh": Language in Anthony Burgess' *A Clockwork Orange* (Tekla Mecsnober); Do aspect and tense exist in the retarded mind? A limited examination of Benjy Compson's idiolect in William Faulkner's *The sound and the fury* (László G. István); Xeroxing the Yellow Pages & vaselining popsicles: trademarks used as common nouns in English (Gáspár Miklós); The verb in Early Scots (Dóra Pödör); A semantic-etymological research of the *Dream-synonyms* (Artúr Korpa – László Rézműves – Ferenc Suba); The etymological background of ethnonyms (András Kiséry – Barnabás Málnay); Linking-R and Intrusive-R (Zsuzsa Németh); The marking of English pronunciation in Hungarian nontechnical publications (Ákos Kertész); Neck or knack? Difficult English phonemes: a survey of Hungarian learners of British Received Pronunciation (Mátyás Bánhegyi – Márta Palojtay); A review of *Structural aspects of language change* by James M. Anderson (András Cser); A review of *History of the English language* by Rolf Berndt (Zsuzsanna Baky).

Volume Two (1994): A review of Thompson's *Dictionary of Hungarian Learners of English* (Péter Bencze); Syllabic consonants in English (Barbara Bércesi); Relational and nonrelational aspects of English stress (András Cser); A linguistic analysis of Shakespeare's *Sonnet XC* (Zsuzsanna Csillagi); Catalytic processes and case adjacency in the English passive (Miklós Gáspár); The two sides of the coin: [ju:] in English (Zoltán Kiss); Stress in English (Andrea Nagy); Intrusive-R: an explanation of its existence (Katalin Román); Pure abuse versus poetical archaism: the vicissitude of pronominal addressing (Erika Sólyom); The difficulty of English (András Szigeti); A general evaluation of Huroon's *Wordy Dictionary* (Andrea Tóth); A text for children and a text for adults (András György Tóth); Tradition in language usage (Krisztina Zimányi).

Volume Three (1995): The low vowels in some English vowel systems (Szabolcs Gollob); Word-initial consonant clusters in English (Laura Kardos – Viola Pongrácz); The status of [ɹ] in English (Boglárka Németh); Different approaches to word stress in English (Levente Benkő); Long, Strong and Weak Retraction (Nóra Wenszky); Sequences of modals in English (Barbara Bércesi); Prepositions or adverb particles? (Kriszta Kardos); The nominal phrase: accounts of its structure (Balázs Surányi); Old English runes and their linguistic peculiarities (Katalin Balogné Bérces); Interferences in a bilingual mind. The wholistic view and a case study (Erika Sólyom); A review of *English Biblical Translation* by A. C. Partridge (Krisztina Bombera).

Volume Four (1997): The distribution of aspiration in English (Katalin Gefferth); Some peculiar cases of vowel constraints in Standard British English (Marianna Tóth); An analysis of shortening in English within Lowenstamm's CV framework (Katalin Balogné Bérces); A "government" consideration of *r* in RP (Csaba Csides); Accounts of Nasal Place Assimilation (Zoltán Kiss); Elementary problems (Anna Kürti); Interonset government and Hungarian: some theoretical considerations (Ágnes Lukács); Hungarian neutral vowels (Péter Dienes); Word-initial consonant clusters in Slovak (Zsuzsanna Bárkányi); A COMPact and COMPrehensible COMPilation COMPrising a COMPArison of COMPLicated approaches to COMPLEMENTisers (Katalin Bihari); Binding Theory and OT (Balázs Surányi); A syntactic account of the subjunctive in Hungarian (Kriszta Szendrői); Jakobson's criticisms and development of Saussure's theory on the arbitrariness of the linguistic sign (András Szigeti); Intonation reaching its pedestal or remaining a quixotic play? A review of *Discourse Intonation and Teaching* by David Brazil (Attila Starčević).

Volume Five (1999): CURE-Lowering: a current phonological change in RP (Dániel Huber); The treatment of Pre-/r/ Breaking in the Underlying Representation (Krisztina Kazár); Post-tonic vowel-zero alternations in English (Anna Kürti); Pre-R Breaking: the centring diphthongs (Balázs Mészáros); Voicing in English (Szofia Mészáros); On English Vowel Shift (Attila Starčević); Adjacency and strong features—a minimalist study (Márta Abrusán); Light verbs and stress avoiding verbs in Hungarian (Anikó Csirmaz); On coordination (Sándor Csaba Kiss); Sociolinguistics and the history of English. A review of *A social history of English* by Dick Leith (Márta Abrusán); Get moving! A review of *Move!* by Norbert Hornstein (Anikó Csirmaz).

Volume Six (2001): The representation of Slovak syllabic consonants in strict CV (Sylvia Blaho); The glides (Judit Cziczelszky); On the functions of sonority (Ágnes Gyarmati); Vowel harmony in Yakut (Dániel Huber); Underlying nasal segments of English (Katalin Romeisz); Laryngeality in GP: h versus H (Attila Starčević); On the definition of phonological strength and assimilation (Marianna Tóth); On comparative constructions (Gergely Kántor); *The Pardoner's Tale*—A study of Modern English and Hungarian translations (Judit Székely).

Volume Seven (2003): Pre-nominal possessive structures in English and Hungarian (Eszter Csernai); Velar processes and their representation in phonology (Dániel Huber); Sentence structure versus no structure (Gergely Kántor); Vowel harmony and the stratified lexicon of Hungarian (Zsuzsa Kertész); “(You) be there!”—On the subject of English imperatives (Andrea Márkus); A Strict CV analysis of Hungarian past forms in Optimality Theory (Tünde Toldy).

These papers are downloadable in postscript and portable document format from <http://www.btk.elte.hu/delg/publications/odd>.

INFORMATION FOR CONTRIBUTORS

Please provide typewritten double-spaced manuscripts with wide margins (50 characters per line, 25 lines per page). Type on one side of the paper only and number all the pages consecutively. The following information should be provided on the first page: the title of the article (or, in case of reviews, the title of the book under discussion, the name of the publisher, the place and date of publication as well as the number of pages), the author's full name and address and an abbreviated title of the paper (not exceeding 45 characters including spaces). Only original papers will be published and a copy of the Publishing Agreement will be sent to the authors of papers accepted for publication. Manuscripts will be processed only after receiving the signed copy of the agreement. Authors are requested to send two hard copies of their manuscript + a floppy disk under DOS.

The manuscript should be accompanied by an abstract of about 100 words. It should be typed on a separate sheet of paper. Tables, diagrams and illustrations (with the author's name and an Arabic number) should be presented on separate sheets. Captions should be typed on a separate sheet and placed at the end of the manuscript. Footnotes should be typed double-spaced on a separate sheet at the end of the article. All language examples (and only these) are to be italicized (single underlining). Citations in the text should be enclosed in double quotation marks (" " in case of a paper written in English, „ " in German and « » in French).

Reference to a publication should be made by the name of the author, the year of publication and, when necessary, by page numbers in the following ways:

- ... as described by Schmidt (1967) ...
- ... as referred to by Hoover (1967, 56–78; 1976, 43).
- ... mentioned by several authors (Elgar 1978, 77; Williams 1981, 154–6) ...

An alphabetically arranged list of references should be presented at the end of the article as follows:

- Bárczi, Géza 1958a. Magyar hangtörténet [The historical phonology of Hungarian]. Akadémiai Kiadó, Budapest.
- Bárczi, Géza 1958b. A szótövek [Word stems]. Akadémiai Kiadó, Budapest.
- Brockhaus, Wiebke 1995. Skeletal and suprasegmental structure within Government Phonology. In: Jacques Durand – Francis Katamba (eds): *Frontiers in phonology: Atoms, structures, derivations*. 180–221. Longman, Harlow.
- Cole, Jennifer 1995. The cycle in phonology. In: Goldsmith (1995): 206–44.
- Goldsmith, John A. (ed.) 1995. *The handbook of phonological theory*. Blackwell, Cambridge MA and Oxford.
- Kaye, Jonathan – Jean Lowenstamm – Jean-Roger Vergnaud 1990. Constituent structure and government in phonology. In: *Phonology 7*: 301–30.
- Tomioka, Satoshi 1997. Focusing effects and NP-interpretation in VP-ellipsis. Doctoral dissertation, University of Massachusetts, Amherst.

For marking subsections decimal notation should be applied. Do not use more than four digits if possible.

Examples within the text should be marked in *italics*. Meanings are to be rendered between inverted commas (' '). If glosses are given morpheme by morpheme, the initial letter of the gloss should be placed exactly below that of the example. Grammatical morphemes can be abbreviated in small case letters connected to the stem or the other morphemes by a hyphen. No period should be applied in such abbreviation. For example:

- (1) (a) A sólymaid elszálltak
 the falcon-gen-pl-2sg away-flew-3pl
 'Your falcons have flown away.'

Examples can be referred to in the text as (1a), (1a–d), etc.

One proof will be sent to the author. Please read it carefully and return it by air mail to the editor within one week.

ISSN 1216-8076



9 771216 807004